Agenda

06 May 2024

7:00 am - 8:20 am
PACIFIC BREAKFAST

Breakfast Session - Global Health - Bealey Foyer

06 May 2024

8:30 am - 10:00 am
ORGAN DONATION AND ORGAN SHARING

Scientific Session - Transplantation Surgery - Bealey 3

8:30 am
Live liver donation and non-directed
Juliet Emamaullee

9:00 am
Australian - New Zealand bi-national kidney exchange, non directed donors
Nick Cross

9:15 am
Non-directed kidney donation in Aotearoa New Zealand and Australia
Nick Cross

9:30 am
Lessons learned from the UK kidney sharing scheme
Neal Dugal

9:50 am
Discussion

8:30 am - 10:00 am
STRATEGIES-WORKFORCE/POLICIES FOR THE GLOBAL HEALTH/RACS AND THE REGIONS

Scientific Session - Global Health - Bealey 5 - Bealey 4

8:30 am
RACS governance perspective - International Engagement Committee
Owen Ung

8:40 am
The Role of the Pacific Community (SPC) in the Region
Lamour Hansell

8:50 am
Global Health update
Kiki Maoate

9:00 am
Panel Discussion

9:15 am
40 years of Interplast - building plastic and reconstructive surgery across the Asia Pacific region
Jess Hill
Exceptional surgery and building lasting health partnerships is what Interplast is known for. Interplast surgeons and other clinical volunteers are amongst the world's best, and they give freely of their time and talent to support those in greatest need. Australian and New Zealand clinicians mobilised by Interplast have been delivering lasting change since 1983 in collaboration with our partners in the region. In this time, we have: •sent over 700 volunteers on more than 1,200 medical and training activities •provided in excess of 47,000 patient consultations •performed over 27,000 life-changing surgical procedures •facilitated over 12,000 medical training opportunities •worked in 25 countries in the Asia Pacific region This presentation will provide an overview of Interplast's work, and reflect on the successes and challenges over 40 years, but Interplast's work against its 4 pillars of focus: •Providing outstanding patient care •Building a sustainable workforce •Strengthening hospitals and other relevant institutions •Delivering health-system change While mobilising teams to deliver clinical and training programs across the Asia Pacific is a core part of Interplast's work, a growing focus on supporting our local partners at an organisational and health system level. For Interplast, this means working with a broad, multidisciplinary team, including anaesthesia, nursing and rehabilitation and other allied health providers, as well as those working in governance and administration roles to achieving sustainable, long-term outcomes.

9:25 am
Cardiac-paediatric outreach
Kirsten Finucane

9:35 am
Registrar involvement with outreach service
Ella Nicholas

9:45 am
Discussion

---

06 May 2024

10:30 am - 12:00 pm
INNOVATIONS WITH REGIONAL PROVIDERS

Scientific Session - Global Health - Bealey 4 - Bealey 5

10:30 am
RACS/Global Health overview and issues
Robin Whitney, Tanoa Suva

10:45 am
New Zealand Medical Treatment Scheme / Pacific Medical Association Group
Debbie Sorensen

11:00 am
Vanuatu experience - "The Boat"
Basil Leodoro

11:15 am
Fred Hollows New Zealand update
Audrey Aumua

11:30 am
Discussion

10:30 am - 12:00 pm
RESEARCH PAPERS

Scientific Session - Transplantation Surgery - Bealey 3

10:30 am
In memory of Professor Sir Peter Morris
Amanda Robertson
Peter Morris was born in Horsham, Victoria, in 1934, was appointed the Nuffield Professor of Surgery at the University of Oxford at age 39 and became a world leader in renal transplantation, clinical immunology and tissue typing. He retired from the Nuffield chair in 2001 and was elected President of the Royal College of Surgeons, England, serving until 2004. He then established the Centre for Evidence in Transplantation at the Royal College of Surgeons. Peter was elected Fellow of the Royal Society in 1994, awarded the Lister Prize in 1997, the Medawar Prize in 2006, was knighted for services to Medicine in 1996 and made a Companion of the Order of Australia for services to Medical Sciences in 2004. Peter trained numerous antipodean surgeons and physicians who went on to run transplant units in Australia and New Zealand. Peter was also a great family man, a proud Australian and a very keen cricketer, golfer and tennis player.

10:40 am
Kidney transplantation outcomes from uncontrolled donation after circulatory death: A systematic review and meta-analysis.
Hugh Schroder
Purpose: Uncontrolled donation after circulatory death (uDCD) is a potential additional source of donor kidneys. This systematic review investigated uDCD kidney transplant outcomes to determine if these are comparable to controlled donation after circulatory death (cDCD). Methodology: MEDLINE, Cochrane and Embase databases were searched. Data on demographic information and transplant outcomes were extracted from included studies. Meta-analyses were performed, and risk ratios (RR) were estimated to compare transplant outcomes from uDCD to cDCD. Results: Nine cohort studies were included, from 2178 uDCD kidney transplants. There was a moderate degree of bias, as four studies did not account for potential confounding factors. The median incidence of primary non-function (PNF) in uDCD was 12.3%, versus 5.7% for cDCD (RR: 1.85; 95% CI 1.06-3.23; P=0.03, I2=75). The median rate of delayed graft function (DGF) was 65.1% for uDCD and 52.0% for cDCD (RR: 1.27; 95% CI 1.09-1.48; P=0.002; I2=74%). The median 1-year graft survival for uDCD was 82.7% compared to 87.5% for cDCD (RR: 1.43.; 95% CI 1.02-2.01; P=0.04, I2=71%). The median 5-year graft survival for uDCD and cDCD was 70% each. Notably, the use of normothermic regional perfusion (NRP) improved PNF rates in uDCD grafts. Conclusion: In conclusion, if uDCD grafts survive beyond the first year, longer term outcomes are comparable to cDCD, which may be facilitated by technologies such as NRP. Therefore, uDCD kidneys could be used to expand the donor pool within Australia and New Zealand.

10:50 am
Outcomes after pancreas retransplantation: a systematic review of the literature and a deeper look at the technical and surgical considerations relevant to this uncommon procedure
Luca Borruso
Introduction After loss of a primary transplanted pancreas allograft, retransplant alone can return patients to an insulin-free life. This systematic review aims to explore the history of, discuss the technical surgical considerations and report the patient and graft survival outcomes of pancreas retransplant (PRTx). Methods A systematic review of the literature (EMBASE, MEDLINE and SCOPUS) was undertaken according to PRISMA guidelines. The primary outcomes of interest in this study were overall patient and graft survival at one and five years post PRTx. Secondary outcomes of interest included the surgical techniques used to implant the PRTx grafts, in particular the optimal method used for managing the exocrine duct and venous drainage of the allograft. Results Fifteen studies were eligible for inclusion encompassing 975 PRTx. Patient survival post PRTx was 90.2% at 1yr and 82% at 5 yrs. PRTx graft survival was 68.4% at 1yr and 55.9% at 5 yrs. Simultaneous pancreas kidney transplant was associated with better PRTx graft survival in several studies, compared with pancreas retransplant alone or pancreas after kidney retransplant. We found that bladder drainage of the PRTx graft may be associated with a reduced likelihood of technical failure and improved death-censored graft survival at five years, but this outcome of interest was inadequately reported across included studies. Conclusions We have demonstrated that PRTx is a safe and acceptable procedure for

carefully selected patients with diabetes mellitus who lose their initial graft. Moving forward, research is needed to determine the impact of exocrine drainage techniques on graft and patient survival; ideally via prospectively designed studies.

11:00 am
30 years of history, evolution, and surgical outcomes of pancreas transplants in a single Australian national pancreatic transplant unit
David Soon
Background Pancreas transplants were performed successfully in 1961 at the University of Minnesota. The first pancreas transplant in Australia was performed in Monash National Pancreas transplant unit (NPTU). Currently Monash national pancreatic transplant center performs a third of Australia's pancreas transplants. Methods Retrospective analysis of all pancreatic transplants done from 1984 to 2022. All types of pancreatic transplants will be included (Simultaneous pancreas and kidney transplants (SPK), Pancreas after kidney (PAK), Pancreas transplants alone (PTA)) Surgical technique, Portal or systemic, exocrine drainage were also collected for the study. Outcomes that were collected include graft associated complications such as graft thrombosis rate and ultimately, pancreas graft survival rate and length of Stay. Results 48 pancreatic transplants were done from 1984 to 2001, following that from 2002 to 2022 that number increased to 236 transplants in total. Surgical technique including pancreatic drainage have evolved from Bladder to enteric drainage. Venous drainage on the other hand have evolved from systemic to portal and currently back to systemic drainage. The rate of Early pancreatic allograft thrombosis (EPAT) in the institution was 20%(CIV), 23%(EIV) and 14%(SMV) from 1984-2001 and subsequently reduced to 5.9%(IVC), 23.3%(CIV), 26.1%(EIV), 13.3% (SMV) after altering the surgical technique. Finally, pancreatic graft survival rates were 75.05% 1-year graft survival and 55.55 5-year graft survival from 1984 to 2001 and 93.5% 1-year graft survival and 80.6% 5-year graft survival from 2002-2022. Conclusion Pancreatic transplants are medically complex and technically demanding procedures that should be done within a specialized unit.

11:10 am
Skin Cancer Profile in Liver Transplant Patients: An Australian cohort
Evania Lok
Background: Cutaneous malignancies are a well-established sequela of the immunosuppression required for liver transplantation. Despite this, there lacks an ideal surveillance protocol and management guideline for skin cancers in this population. The authors aim to undertake a retrospective review that analyses skin cancer data in Liver transplant recipients at a single major transplant centre in Victoria, Australia. Methods: 216 liver transplant recipients were identified from the Austin Health Liver transplant database from 2000 to 2020. 116 patients developed cutaneous malignancies post-transplant with the remaining patients utilised as a control group for comparison. Demographic data including Fitzpatrick skin type and skin cancer risk factors were collected. 443 cutaneous malignancies were identified, and further analysis of skin cancer characteristics were performed. Results: Age, male sex, Fitzpatrick skin-type 1-2, smoking, personal history of skin cancer pre transplant, increased frequency of blistering sunburn and Azathioprine use was associated with the development of skin cancer. Most skin cancers developed were moderately or poorly differentiated SCCs in the head and neck area. Most of these lesions were managed by general practitioners and dermatologists in the community. Conclusion: The data demonstrates that a variety of personal risk factors increase the risk of developing cutaneous malignancies post liver transplant. Furthermore, it confirms that skin cancers developed are higher-grade and more aggressive than in the normal population. This helps to stratify patient risk-profiles to identify high-risk patients and aids protocol development for skin cancer surveillance in the post liver transplant population.

11:20 am
Dcd Kidneys Are Associated With Reduced Flow And Increased Resistance On Cold Perfusion Machine
Alice Nicol

11:30 am
Achieving Homeostasis – A Novel Cost Effective Approach to Normothermic Machine Perfusion with Dialysis Using "Oxylasate"
Rohan Bhattacharjya
Purpose: Maintenance of pH and temperature are prerequisites for effective enzyme activity. While normothermic systems designed on the framework of cardiopulmonary bypass circuits or ECMO circuits have been in circulation, their ability to compensate for metabolic acidosis is limited. Therefore, they are not suitable platforms for organ resuscitation. In addition, the cost barrier prevents the uptake of the technology. This pilot study explored whether it was possible to modify a dialysis system to synchronously oxygenate and dialyse blood to create a novel normothermic perfusion machine. Methodology: A Baxter PrismaflexTM Dialysis System was modified to use oxygenated dialysate. Whole blood was used to perfuse

12 composite porcine abdominal blocks. Serial arterial and venous blood gas samples were taken to assess oxygenation across the dialysis membrane, oxygen consumption, carbon dioxide production and pH maintenance. Results: Oxygen transfer across the dialysis cartridge was effective, with significantly higher PaO2 (M = 318 mmHg, SD = 119) as compared to room air oxygenation ($p<0.05$). Oxygen consumption alongside carbon dioxide production was observed, with a baseline approximately three times that of normal resting tissue oxygen consumption. The dialysis function was able to maintain pH with a range of normality and the blocks were successfully perfused and preserved for 6 hours. Conclusion: The use of oxygenated dialysate allows the repurposing of existing medical equipment for normothermic preservation at a fraction of the cost currently available. Short-term outcomes in this study demonstrated the feasibility and efficacy of this technology.

11:40 am
An audit of paediatric en bloc renal transplantation: a single centre experience
Kate Santosh Olakkengil
Purpose: To assess the surgical outcomes of patients who underwent paediatric en bloc renal transplants at Central and Northern Adelaide Renal and Transplantation Services (CNARTS). Methods: Prospectively collected data for all patients who underwent paediatric en bloc renal transplants at CNARTS between 1 January 1994 and 31 December 2023 was analysed. Results: 10 patients underwent paediatric en block renal transplants, 6 male and 4 female. The youngest donor was 4 months old and the oldest was 6 years old (mean age 2.59 ± 1.53 years). All donations were made following brain death. The mean age of recipients was 38.4 ± 11.1 years. In five cases, the ureteric anastomosis was achieved using the pantaloon technique by joining the distal ends of the two ureters to create a new ureterocystostomy with the bladder. In the remaining cases, the ureters were implanted separately. Of the 10 patients, two lost both grafts during the initial post operative period. The first patient had a graft thrombosis on day 2 post op, with the second graft then failing due to primary non function. The second patient had graft thromboses on day 2 and day 3 post op. A third patient developed antibody mediated rejection and lost both grafts three years post transplant. For the seven remaining patients, both grafts worked normally on follow up. Conclusion: Paediatric en bloc renal transplantation has the potential to increase the donor pool for transplant recipients. Our unit has done 7 transplants in the last 10 years, with graft function being satisfactory. Further monitoring is required to ascertain long term efficacy.

11:50 am
Ex-vivo Machine Perfusion of Composite Organ Blocks allows for Physiological Assessment of the Entero-Hepatic System
David Daniel
Purpose: Viability testing is a proposed advantage of normothermic perfusion. Rapid turnaround is central to be of clinical utility. Organs of the alimentary system have complex interplaying systems regulating function that cannot be tested with solitary perfusion. This study investigated, in a novel isothermic preservation model of composite porcine abdominal blocks, the scope of physiological testing for viability assessment. Methodology: 4 composite porcine abdominal organ blocks (liver, kidney, pancreas and small bowel) were retrieved from beating heart donors. These were perfused with an acellular oxygenated perfusate and compared to 4 blocks undergoing static cold storage. Arterial and venous glucose, ICG retention at 15 mins, insulin and GLP-1 in response to enteral glucose stimulation and creatinine clearance were evaluated. Serial ATP (liver, kidney) was assessed. Results: A reducing glucose gap with incrementing ATP levels indicated aerobic metabolism as opposed to gluconeogenesis in the liver and kidney. GLP-1 levels rose post enteral glucose stimulation followed by an insulin surge in keeping with normal physiological responses. The ICG retention of the perfused livers was <20% in all blocks and the kidneys demonstrated the ability to clear creatinine. Conclusions: The novel method was successful in displaying preservation of a composite porcine organ block and ability to test and maintain physiological process. ‘En bloc’ preservation may be useful for real time physiological testing and decreasing discard rates with extended criteria donors.

---

06 May 2024

12:00 pm - 12:30 pm
KEYNOTE LECTURE - ASSISTANT PROFESSOR JULIET EMAMAULLEE (LOS ANGELES, USA)

Keynote Lecture - Transplantation Surgery - Bealey 3

12:00 pm
Achieving work life balance as a transplant surgeon
Juliet Emamaullee

12:00 pm - 12:30 pm
THE ROWAN NICKS LECTURE

Keynote Lecture - Global Health - Bealey 5 - Bealey 4

12:00 pm
Lessons learnt from working in isolation - the story of Neurosurgery in Fiji
Alan Biribo

---

06 May 2024

1:30 pm - 2:00 pm
KEYNOTE LECTURE - MR NEAL DUGAL (DUBLIN, IRELAND)

Keynote Lecture - Transplantation Surgery - Bealey 3

1:30 pm
Robot-assisted kidney transplantation: responsible implementation of a new procedure
Neal Dugal

1:30 pm - 2:00 pm
KEYNOTE LECTURE - SIR COLLIN TUKUITONGA (AUCKLAND, AOTEAROA NEW ZEALAND)

Keynote Lecture - Global Health - Bealey 5 - Bealey 4

1:30 pm
Sustainability of surgical services to the region
Collin Tukuitonga

---

06 May 2024

2:00 pm - 3:30 pm
NOVEL STRATEGIES FOR ORGAN UTILISATION

Scientific Session - Transplantation Surgery - Bealey 3

2:00 pm
Normothermic regional perfusion in donation after cardiac death - what we are missing out on
Henry Pleass

2:20 pm
Normothermic Machine Perfusion-changing landscape of deceased donor liver transplantation

Muhammad Rabbani

2:40 pm
Imaging mass cytometry and single cell analysis in allograft rejection
Juliet Emamaullee

3:00 pm
Strategies to improve deceased donor kidney utilisation
Neal Dugal

3:20 pm
Discussion

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - Global Health - Bealey 4 - Bealey 5

2:00 pm
Colonisation and its aftermath: reimagining global surgery
Rennie Qin
Purpose Coloniality in global health manifests as systemic, non-merit based inequalities that benefit one group at the expense of another. Global surgery seeks to insert surgery into the global health agenda; however, it inherits the biases in global health. Methodology We examined inequities in global surgery using a Delphi consensus-building process drawing on the literature and our lived experiences. Results We identified five categories of non-merit inequalities in global surgery: Western epistemology, geographies of inequity, unequal participation, resource extraction, and asymmetric power and control. We observed that global surgery is dominated by Western biomedicine, with a lack of inter-professional and inter-specialty collaboration, incorporation of Indigenous medical systems, and sociocultural, and environmental contexts. Global surgery is Western-centric and exclusive, with a unidirectional flow of personnel from the Global North to the Global South. There is unequal participation by location (Global South), gender (female), specialty (obstetrics and anaesthesia), and profession (non-specialists, non-clinicians, patients, and communities). Benefits, such as funding, authorship, and education, mostly flow towards the Global North. Institutions in the Global North have disproportionate control over priority setting, knowledge production, funding, and standards creation. This naturalises inequities and masks upstream resource extraction. Conclusion Shifting global surgery towards equity entails building inclusive, pluralist, polycentric models of surgical care by providers who represent the community, with resource controlled and governance driven by communities in each setting.

2:10 pm
Women's Health: Near enough is not good enough
Erica Whineray Kelly
Women's Health remains "understudied, under-recognised, and under-treated worldwide". Women in Aotearoa face particular barriers to equitable, cohesive, and accessible health care and health outcomes which is worse for Māori and Pacifika women. Whilst women have a longer life-expectancy, a gender health gap exists with women spending more of their life in poor health compared to men, termed the health-survival paradox. Women's Healthcare has tended to focus on female-specific conditions, ignoring the fact that Pākehā women are most likely to die from cardio-and cerebrovascular disease, and for Māori wāhine, lung disease. Increasingly scientists and physicians are recognising that the presentation and treatment of up to 700 conditions can vary, as much of modern medicine is based on research performed exclusively on cisgender men. For example, women are 50% more likely to die from an acute cardiac syndrome, to suffer side-effects from medications, and experience significant delays in diagnosis and treatment. This presentation will review the history of this phenomenon and examine what this means for research and healthcare in the future.

2:20 pm
Advancing SOTA Care in Rural African Communities
Neil Wetzig
Background: In eastern DR Congo, a survey revealed 35% of households required a surgical procedure in the

preceding 12 months. Surgery, Obstetric, Trauma and Anaesthesia (SOTA) care is a critical part of primary health care and most surgery is performed by general doctors. 25% of those requiring surgical care did not present due to poor care previously Methods: A Diploma in SOTA Care Course was begun in 2023 to train general doctors from rural health centres. They spend 2 months at a regional centre undergoing skills and knowledge training. Approval for the course and data collection was obtained from Provincial Health Authorities. Data is collected from participants by pre and post testing of knowledge and each participant rates their surgical skills confidence on a 0 to 10 numerical scale before and after the course. Results: Initial data from the first cohorts shows an improvement in knowledge (58% pre-testing to 74% post-testing). Skills confidence increased from a mean of 5 pre-course to 8 post-course. For Bellwether procedures, the skills confidence increased for each of 3 procedures (Laparotomy 5-> 8; C-section 7->9; Management of an Open Fracture 3->7). Participant surveys revealed most rural doctors performing surgery had not previously been trained in the basics of surgical care or patient safety. Summary: The aim of this structured practical skills-based upskilling for rural doctors, is to reduce morbidity and mortality from surgery - and improve clinical outcomes and patient presentation. Such a hands-on based curriculum like this may be required in many LMICs.

2:30 pm
Ongoing Development and Implementation of a Global Digital Operative Encounter Registry
Neil Wetzig

2:40 pm
Barriers and opportunities to improving surgical, obstetric, and anaesthesia care in Fiji
Rajeev Patel
Purpose Quantitative facility assessments have identified gaps in surgical, obstetric, and anaesthesia (SOA) care in Fiji. This qualitative study aims to elucidate the barriers and enablers for surgical system strengthening to inform policymaking. Methodology We undertook semi-structured interviews with 31 SOA providers and policymakers. Thematic analysis was conducted using deductive and inductive codes. Results Significant chronic deficits in surgical infrastructure, human resource, and information technology are exacerbated by internal (supply chain and maintenance) and external shocks (climate change, natural disasters, pandemics). This impairs the type and quality of care. Hospitals operate on ‘emergency mode’, with delays in elective surgery, increasing costs and complications. Geographical isolation poses a barrier to timely access, provision of specialised services, and the maintenance of complex equipment and human resources. Solutions include mobility of care through outreaches, regional collaboration and connectivity across Oceania. There is a disconnect between the clinical reality on the ground and policymakers. Clinical governance and initiative have been highlighted as a strength. There is a need to build resilience through forward planning, coordinated use of resources, preparedness, and sufficient buffers. Increased financial investment from policymakers to meet population needs is required. Conclusion Policies to improve SOA care must be contextualised to local barriers and build on existing solutions from the ground up. In addition to policy implications, our results can inform theoretical health system and resilience frameworks.

2:50 pm
High-level evaluation of surgical simulation-based education in low- and middle-income countries: a systematic review
Samuel Robinson
Purpose Evaluation is an important tool to appraise the impact and effects of simulation-based education (SBE) programmes. We conducted a systematic review to investigate the global incidence and effectiveness of SBE programmes in low- and middle-income countries (LMICs). In this subset analysis we aimed to ascertain the extent of evaluation in surgical SBE programmes. Methodology We included four databases: Medline, Embase, Emcare and the Cochrane Library. Only studies evaluating Level 4 of the Kirkpatrick model were included, while simulation-based assessment and validation studies were excluded. Results were presented using narrative synthesis. The review was conducted following the PRISMA guidelines. Results After retrieving 27,738 records, 97 studies were included. Of these, 6/97(6%) were conducted in surgery and urology. In total, 9/97(9%) evaluated all levels of the Kirkpatrick model including two studies focusing on surgery. In addition to Kirkpatrick Model Level 4, 82/97(85%) evaluated additional programme outcomes. The majority of studies were from sub-Saharan Africa, 54/97(56%). East Asia and the Pacific accounted for only 13/97(13%) of studies, with no eligible publications from the Pacific Islands. When testing for statistical significance, 61/81(75%) demonstrated at least partial improvement in Level 4 outcomes. Conclusion There is an underutilisation of surgical simulation in LMICs achieving a high level of evaluation. While additional unpublished activities may be occurring, there is a need to conduct and publish more robust research to evaluate the effectiveness of surgical simulation in these settings.

3:00 pm

Context matters for disability and priority setting for musculoskeletal diseases: revisiting the approach to disability weights and disability-adjusted life years
Helena Franco
Purpose: Health metrics have evolved with increasing sophistication, with the disability-adjusted life-year (DALY) emerged as a widely used metric. While DALYs vary between countries, the global disability weights (DWs) that are integral to the DALY ignore the potential impact of local factors on the burden of disease. This paper explores the variability in the DW for developmental dysplasia of the hip (DDH) in relation to to local health environments using select health system indicators. Methods: The DW for DDH was assessed using three methods: ordinal preference ranking with a fixed rankles, a time-trade-off approach and a Visual Analogue Scale. The correlation between select health system indicators and the DW for DDH per country was assessed with a piecewise linear regression. Results: The DW for DDH increases with decreasing income level of countries. The Human Development Index and the Gross Domestic Product per capita are both negatively correlated with ($p<0.05$) the DW for DDH per country. For the indicators surgical workforce, surgical procedures and hospital beds per 1000 population, there is a significant negative correlation in countries not meeting the minimum standard of that indicator ($p<0.05$), while for countries meeting that minimum standard, the correlation between DW for DDH and the respective indicator is not significantly different from zero. Conclusion: Consideration should be given to re-establishing the DWs for health entities in countries that do not meet the minimum standards of a functional health system. This would more accurately reflect the burden of disease from a functional perspective in LMICs, and perhaps allow for more informed priority setting within LMICs and for donors.

3:10 pm
"A Quality Improvement Study to Assess Patient Satisfaction in Surgical Out Patient Department at a Tertiary Care Hospital in North India: A Cross Sectional Study"
Saumya Singh
The perceived quality of medical services is a critical determining factor of modern healthcare service utilisation. As per the evidence, 5.7 and 8.4 million deaths are attributed to poor-quality care each year in Low- and Middle-income countries (LMICs), and up to 15% of overall deaths are due to poor quality. This study aims to assess the perceived quality of medical services and associated factors in outpatient departments of public hospitals at a tertiary care public hospital in North India. A facility-based cross-sectional study was conducted among Surgical outpatient department attendants of One of the leading hospitals in North India (for three months). An exit interview was used to collect data using a pretested and structured questionnaire. Both bivariable and multivariable linear regressions were carried out. Significant predictors were reported at $p < 0.05$ with a 95% confidence interval. With a 100% response rate. 80% were satisfied with the doctors and health care providers, while only 30% were satisfied with the available facilities. 72.7 % perceived the treatment cost as reasonable. Most patients using outdoor and indoor services were satisfied with the care received and the behaviour of the hospital staff. However, the Registration process must be streamlined to reduce waiting time and delays. The regional health department should understand how to improve outpatient service quality by providing necessary medication, reducing wait times, and designing job training for health care providers. A system for patient feedback may be institutionalised at all health facilities to improve the quality of care.

---

06 May 2024

5:00 pm - 6:30 pm
CONVOCATION CEREMONY AND SYME ORATION (TICKETED EVENT)

Convocation - *Cross Discipline* - Auditorium 1 - Auditorium 4

5:00 pm
Ka pū te ruha, ka hao te rangatahi
Suzanne Pitama

5:20 pm
Convocation Ceremony
Kerin Fielding

06 May 2024

6:30 pm - 7:30 pm
WELCOME RECEPTION (TICKETED EVENT)

Cocktail - *Cross Discipline* - Ground Level Foyer

07 May 2024

7:00 am - 8:20 am
FUN RUN (TICKETED EVENT)

Breakfast Session - Younger Fellows, Trainees Association

7:00 am - 8:20 am
MASTERCLASS (MC01): LAPAROSCOPIC ONE ANASTOMOSIS GASTRIC BYPASS (TICKETED EVENT)

Masterclass - Bariatric Surgery - Conway 1

7:00 am
Medtronic Sponsor Presentation: LigaSure™ XP
Cheryl Handberg

7:05 am
Technical approaches and avoiding pitfalls
Karl Peter Rheinwalt
During the last decade, the One Anastomosis Gastric Bypass (OAGB) received almost worldwide acceptance and popularity as bariatric and metabolic procedure. Its technique is appearing rather simple and straight forward. Albeit, as in other such procedures, to avoid disappointing short- and longterm complications, certain essential principles need to be respected. With this goal in mind, this Masterclass course will present step by step a current standardized technique of OAGB. In addition, possible technical variations will be presented as well. The focus will be both on the crucial keypoints and on the avoidance of typical and specific technical failures, complications, and pitfalls.

7:00 am - 8:20 am
MASTERCLASS (MC02): AVOIDING COMMON PITFALLS IN BREAST SURGERY (TICKETED EVENT)

Masterclass - Breast Surgery - Dobson 4

7:00 am
How to plan wide local excision well - importance of scar placement
Josie Todd

7:20 am
Avoiding common pitfalls in patients with fatty breasts
Emily Davenport

7:40 am
Ideal management of small to medium cancers in large breasted patients
Elisabeth Elder

8:00 am
Discussion

7:00 am - 8:20 am
MASTERCLASS (MC03): PERITONECTOMY (TICKETED EVENT)

Masterclass - Colorectal Surgery - Conway 5

7:00 am
Discussion

7:00 am - 8:20 am
MASTERCLASS (MC04): I WANT A HPB ROBOT (TICKETED EVENT)

Masterclass - HPB Surgery - Conway 2

7:00 am
Evidence-based approached to starting a program
Sanket Srinivasa

7:15 am
ANZ MIPS: a collaborative approach
Mehan Siriwardhane

7:30 am
A trainee experience
Emily Olive

7:45 am
What I wish I knew when I started
Shinn Yeung

8:00 am
Panel Discussion

7:00 am - 8:20 am
MASTERCLASS (MC17): DERMAL SUBSTITUTES FOR NOVICES AND EXPERTS (TICKETED EVENT)

Masterclass - Burn Surgery, Plastic & Reconstructive Surgery - Conway 3

Proudly supported by PolyNovo Well established in burn care, the use of dermal substitutes has expanded to assist in the closure of problematic wounds relevant to multiple specialties. This masterclass will provide information relevant to those wanting to know about this potential solutions as well as those already experienced in the use of dermal subsitutes. An overview and 'tips and tricks' relevant for both novices and experts in the use of dermal subsititutes will be presented by the panel (Dane Holden, general surgeon; Manar Khashram, vascular surgeon; Craig McBride, paediatric surgeon and Richard Wong She, plastic & reconstructive surgeron) along with case studies and interactive discussion with participants.

7:00 am

Introduction
Richard Wong She

7:05 am
Polynovo Sponsor Presentation
Tim Barker

7:10 am
Overview
Richard Wong She

7:25 am
Case Studies
Craig McBride, Manar Khashram, Dane Holden

7:00 am - 8:20 am
MASTERCLASS (MC19): EARLY CAREER ADVICE (TICKETED EVENT)

Masterclass - Colorectal Surgery - Conway 4

7:00 am
Panel Discussion
Simi Lolohea, Susan Shedda, Ian Faragher, Angus James Watson, Elizabeth Murphy, Peter Sagar, Amy Lightner

---

07 May 2024

8:30 am - 10:00 am
OPENING PLENARY SESSION: CLIMATE CHANGE

Plenary Session - *Cross Discipline* - Auditorium 3 - Auditorium 4 - Auditorium 1 - Auditorium 2

8:30 am
Powhiri

8:45 am
The President's Welcome
Kerin Fielding

8:50 am
The Conveners' Welcome
Philippa Mercer, Richard Perry, Jeremy Simcock

8:55 am
ANZJS Lecture: Climate Change and the Pacific
Collin Tukuitonga

9:20 am
Climate change and the challenge for global communities
Bronwyn Hayward

9:40 am
Climate change and the surgeon
Ben Dunne

07 May 2024

10:30 am - 12:00 pm
ADVANCED HIATAL HERNIA - VIDEO SESSION

Scientific Session - Upper GI Surgery - Conway 3

10:30 am
Mesh for hiatal hernias
Garett Smith

10:50 am
Advanced hiatal hernia videos
Leigh Archer, Iain Thomson, Patrick McQuillan

11:10 am
Complication post hiatal hernia repair
Oliver Fisher

11:30 am
Laparoscopic harvest of a gastro-omental free flap for pharyngeal reconstruction
Jodie Trautman
Circumferential pharyngeal reconstruction is a complex and morbid procedure, with potential complications including fistula, stenosis and carotid blowout, all made more likely in the salvage setting. Various free tissue transfers can be employed to replace the pharyngeal defect. The gastro-omental free flap provides a tubular conduit of stomach with attached greater omentum, supplied by the right gastroepiploic vessels. This free flap has been used for circumferential or partial pharyngeal reconstruction since 1979. The advantages of the flap are in the mucous-secreting lining and the omentum, which acts to seal any continuity defects. Our group was the first to describe a fully laparoscopic harvest of this flap, an innovation we believe overcomes most of the downside of this flap by avoiding laparotomy. We present a case of a 63-year-old male who underwent salvage total laryngopharyngectomy and bilateral neck dissection for recurrent hypopharyngeal SCC, with reconstruction using a gastro-omental free flap. In this verbal presentation, we show an intraoperative video of the laparoscopic harvest of a gastro-omental free flap, demonstrating the approach, technique and considerations for successful flap harvest.

11:40 am
Discussion

10:30 am - 12:00 pm
BREAST CANCER IN YOUNG WOMEN

Scientific Session - Breast Surgery - Dobson 4

10:30 am
Delivering optimal surgery in the era of well-informed young patients
Cindy Mak

10:55 am
Inflammatory breast cancer in young women
Ashu Gandhi

11:15 am
Fertility and safety of pregnancy following breast cancer diagnosis in young patients
Dylan Turner

11:40 am
Psychosocial aspects of breast cancer diagnosis in young women
Rebecca Lee

10:30 am - 12:00 pm
CLEFT AND CRANIOFACIAL SURGERY IN THE PACIFIC REGION

Scientific Session - Global Health, Plastic & Reconstructive Surgery, Craniomaxillofacial Surgery - Dobson 2

10:30 am
Cleft lip in the Pacific (Fiji experience)

10:50 am
Cleft lip in Aotearoa New Zealand and Australia
Jonathan Burge

11:10 am
Encephaloceles in Fiji
Alan Biribo

11:30 am
Aotearoa New Zealand / Australia experience of encephalocoeles

11:50 am
Discussion

10:30 am - 12:00 pm
CONTROVERSIES IN BARIATRIC SURGERY

Scientific Session - Bariatric Surgery - Conway 1

10:30 am
Does the hiatus hernia need repair?
Paul Burton, Michael Talbot

10:50 am
Revising sleeve for reflux - any bypass will do
Nicholas Evennett, David Martin

11:10 am
Redo surgery for weight regain - benefitting the patient or surgeon?
George Hopkins, Mark Stewart

11:30 am
Routine pre-op psychology input improves outcomes
George Hopkins, Matthew Honore

10:30 am - 12:00 pm
HEAD AND NECK CANCER

Scientific Session - Otolaryngology Head & Neck Surgery - Bealey 4

10:30 am
Recipient Vessel Selection for Free Flap reconstruction in the Vessel Depleted Neck

Sydney Ch'ng

10:50 am
Clinical care pathway for the management of anaplastic thyroid cancer
Shamir Chandarana

11:10 am
Discussion

10:30 am - 12:00 pm
MALIGNANT PROCTOLOGY

Scientific Session - Colorectal Surgery - Conway 5

10:30 am
Paget's disease of the perianum – work-up and management strategies
Cameron Law

10:42 am
AIN surveillance and adjuncts
Timothy Chittlebotough

10:54 am
SCC and immunotherapy – what is the future of SCC management?
Glen Guerra

11:06 am
Salvage surgery for SCC – when and how?
Kirk Austin

11:18 am
Melanoma in the context of immunotherapy – has the surgical treatment changed?
Avnish Saklani

11:30 am
What to do with Rectal/Peri-rectal GIST
Arend Merrie

11:42 am
Discussion

10:30 am - 12:00 pm
NETS OF RETROPERITOENUM

Scientific Session - Endocrine Surgery, HPB Surgery - Bealey 5

10:30 am
Management of locally advanced phaeochromocytoma
James Lee

10:45 am
When to resect asymptomatic NET pancreas
Euling Neo

11:00 am
Role of Genomics in NETS
Callisia Clarke

11:15 am
Update on targeted therapies for NETS
Sam Dunn

11:30 am
Questions

11:40 am
Panel of cases - adrenal and pancreas
Fraser Jeffery
A series of cases will be presented for discussion by our panel of experts with audience participation encouraged.

10:30 am - 12:00 pm
PLANNING AND SETTING UP A SERVICE - RESPONSIBILITY TO PATIENT, SOCIETY AND THE COMMUNITY

Scientific Session - Burn Surgery, Plastic & Reconstructive Surgery - Conway 2

All patient care occurs within the framework of 'a service'. This session covers the experiences of those who have had to develop a service in order to deliver the care their patients need. Whilst each faced (and overcame) unique challenges, there are consistent, shared and on-going challenges which we can all learn from.

10:30 am
Developing a burn service - lessons from the NHS
Peter Dziewulski

10:45 am
A multidisciplinary hand and upper limb loss service
Andrew Hart
This covers establishing a monthly a mdt combined clinic & service with psychology, prosthetics, surgeons, & hand therapists. We offer everything from stump revision/pain surgeries through autologous reconstruction/allotransplant, to a full suite of upper limb prosthetics including patient controlled electronics, to rehab and psychology support, to home improvement. It has enabled recruitment of first in world translational research collaborations, and humanised the care of this very deserving patient group.

11:00 am
Fat grafting - what have we learnt?
Steven Williams
Fat grafting has become an effective tool for many aspects of aesthetic and reconstructive surgery. As research and tools continue to evolve it has become more effective and safer than ever as part of our aesthetic and reconstructive toolbox.

11:15 am
Setting up a Service - the Rule of C's
Karen Smith

11:30 am
Establishing a Burns Service in PNG – successes, challenges and lessons learned
Jackson Nuli
This presentation will touch briefly on the history of plastic surgery & burns in PNG, including a reflection on past surgeons in PNG who have led this work, and the support of Interplast visits over 40 years. It will provide an overview of the current plastic and reconstructive and burns services in PNG, and the challenges faced across the country. It will provide insights into how burns surgery can be improved in PNG, and plans for the next 5-10 years to do this.

11:45 am
Discussion

10:30 am - 12:00 pm
RISK AND IMPACT OF COMPLAINTS ON THE SURGEON

Scientific Session - Senior Surgeons Program, Trainees Association, Medico-Legal, Younger Fellows - Conway 4

10:30 am
Impact of complaints process on surgeons and their practice
Owen Bradfield

10:50 am
The role of the expert witness and insights into complaint
Peter Sagar

11:10 am
Risk for complaints
Owen Bradfield

11:30 am
Panel Discussion

10:30 am - 12:00 pm
SURGICAL PALLIATIVE CARE

Scientific Session - General Surgery, Surgical Oncology, Trainees Association - Bealey 3

10:30 am
What is palliative care?
Rachel Wiseman
This talk will provide a brief overview of palliative care and it's structure in Australasia. It will define and outline differences between a variety of terminologies that are commonly used in palliative care. Data from Aotearoa New Zealand will be used to showcase changing patterns of dying across the motu and expected challenges that this presents for future provision of palliative care.

10:50 am
Principles of palliative surgery
Pringl Miller

11:10 am
Palliative radiotherapy
Chris Harrington

11:30 am
Case based discussion

10:30 am - 12:00 pm
UNCONSCIOUS BIAS

Scientific Session - Surgical Education - Dobson 3

10:30 am
Introduction
Justin Cain

10:40 am
Bias or Discrimination
Jamie-Lee Rahiri

10:50 am
Intersectionality in Surgery
Rhea Liang

11:00 am
Bias in feminism
Ruth Mitchell

11:10 am
Bias in education & training
Simon Fleming

---

07 May 2024

12:00 pm - 12:30 pm
KEYNOTE LECTURE - ASSOCIATE PROFESSOR CALLISIA CLARKE (MILWAUKEE, USA)

Keynote Lecture - HPB Surgery - Conway 2

12:00 pm
Multimodal therapy for pancreas cancer
Callisia Clarke

12:00 pm - 12:30 pm
KEYNOTE LECTURE - ASSOCIATE PROFESSOR MICAHEL TALBOT (SYDNEY, AUSTRALIA)

Keynote Lecture - Upper GI Surgery - Conway 3

12:00 pm
Some things can't be fixed with an operation. Success and failure in foregut surgery
Michael Talbot

12:00 pm - 12:30 pm
KEYNOTE LECTURE - DR ASHU GANDHI (MANCHESTER, UK)

Keynote Lecture - Breast Surgery - Dobson 4

12:00 pm
Pregnancy associated breast cancer: dispelling myths and current best practice – UK guideline overview
Ashu Gandhi

12:00 pm - 12:30 pm
KEYNOTE LECTURE - DR PRINGL MILLER (CHICAGO, USA)

Keynote Lecture - Surgical Oncology - Bealey 3

12:00 pm
Founding the Surgical Palliative Care Society
Pringl Miller

12:00 pm - 12:30 pm
KEYNOTE LECTURE - DR SHAMIR CHANDARANA (CALGARY, CANADA)

Keynote Lecture - Otolaryngology Head & Neck Surgery - Bealey 4

12:00 pm
The impact of pragmatic science on cancer delivery
Shamir Chandarana

12:00 pm - 12:30 pm
KEYNOTE LECTURE - PROFESSOR AMY LIGHTER (CLEVELAND, USA)

Keynote Lecture - Colorectal Surgery - Conway 5

12:00 pm
Navigating industry and research
Amy Lightner

12:00 pm - 12:30 pm
KEYNOTE LECTURE - PROFESSOR JEFFREY MARCUS (DUKE UNIVERSITY, USA)

Keynote Lecture - Plastic & Reconstructive Surgery, Global Health, Craniomaxillofacial Surgery - Dobson 2

12:00 pm
Primary cleft lip repair
Jeffrey Marcus

12:00 pm - 12:30 pm
KEYNOTE LECTURE - PROFESSOR TRACY WANG (MILWAUKEE, USA)

Keynote Lecture - Endocrine Surgery - Bealey 5

12:00 pm
Setting up a dedicated adrenal unit
Tracy Wang

12:00 pm - 12:30 pm
KEYNOTE LECTURE -DR KARL RHEINWALT (COLOGNE, GERMANY)

Keynote Lecture - Bariatric Surgery - Conway 1

12:00 pm
Comparison of OAGB with other current bariatric/metabolic procedures
Karl Peter Rheinwalt

One Anastomosis Gastric Bypass (OAGB) has become an accepted standard bariatric procedure almost worldwide. Nowadays, in some countries it replaced even Sleeve Gastrectomy (SG) as currently most frequent bariatric-metabolic surgery. The question may be uprised about the standing of OAGB in comparison to the globally still most popular procedures SG and Roux-en.Y Gastric Bypass (RYGB). The answers are difficult to determinate as large cohorts of OAGB have ususally been studied with this procedure only. Nevertheless the author undertakes the attempt to present the relevant available data of comparisons between OAGB on one side and SG respectively RYGB on the other. As a conclusion of the results, OAGB seems to be a very safe and straight forward procedure. Its operation time is significantly shorter than in RYGB. Concerning weight loss and remission of co-morbidities, OAGB shows better short and mid-term results than SG and at least non-inferior results than RYGB. If slightly better results have been noted with OAGB this may be mainly due to the longer biliopancreatic limb in OAGB. RYGB is the superior bariatric operation concerning improvement of pre-existing gastroesophageal reflux (GERD) and avoidance of new-onset postoperative reflux. Even if OAGB in total seems to cause less symptomatic GERD than SG, the inherent risk of chronic biliary reflux remains the achilles tendon of OAGB, beside the need for lifelong vigilant follow-up and reinforced supplementation to avoid nutritional deficiencies.

12:00 pm - 12:30 pm
THE HAMILTON RUSSELL MEMORIAL LECTURE - DR BRENESSA LINDEMAN (BIRMINGHAM, USA)

Keynote Lecture - Surgical Education - Dobson 3

12:00 pm
Where the rubber meets the road: pearls and pitfalls of implementing competency-based assessment
Brenessa Lindeman

---

07 May 2024

1:30 pm - 2:00 pm
BREASTSURGANZ KEYNOTE LECTURE - DR PETER CHIN (TAURANGA, AOTEAROA NEW ZEALAND)

Keynote Lecture - Breast Surgery - Dobson 4

1:30 pm
Navigating the Oncoplastic Multiverse: from Radical to Real World
Peter Chin

1:30 pm - 2:00 pm
KEYNOTE LECTURE - ASSOCIATE PROFESSOR ALICE WEI (NEW YORK, USA)

Keynote Lecture - HPB Surgery - Conway 2

1:30 pm
Modern HCC treatments: from famine to feast
Alice Wei

1:30 pm - 2:00 pm
KEYNOTE LECTURE - DR JAMES SHAND (AUCKLAND, AOTEAROA NEW ZEALAND)

Keynote Lecture - Bariatric Surgery - Conway 1

1:30 pm
Medical Management of Obesity in Counties Manukau
James Shand
Obesity is a chronic condition associated with multiple significant adverse health outcomes. Recent decades have seen dramatic increases in obesity rates across much of the globe and it now represents one of the foremost challenges facing healthcare systems. Within the New Zealand context, over a third of adults are now classified as obese, with particularly high rates in Maori and Pacific communities. Te Mana Ki Tua is a specialist weight management service established in South Auckland in 2023. The service utilises non-surgical approaches to complex obesity including low energy diets and weight management medications. This presentation covers the non-surgical management of obesity and the experience of our service to date. I will also discuss where the novel anti-obesity medications sit alongside established surgical interventions and the future of this area.

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR FRÉDÉRIC TRIPONEZ (GENEVA, SWITZERLAND)

Keynote Lecture - Endocrine Surgery - Bealey 5

1:30 pm
Fluorescent techniques for the detection and preservation of the parathyroid glands and future perspectives
Frédéric Triponez
Hypoparathyroidism is a common complication of total thyroidectomy. Due to their small size, variable anatomical position, and potential resemblance to the surrounding tissue, intraoperative localization of the parathyroid glands can be challenging. During thyroidectomy, the parathyroid glands need to be dissected off the thyroid and left in situ, which puts them at risk of being directly damaged, inadvertently removed, or having their vasculature injured. In 5-15% of patients, the vascular supply to all four glands is at risk when total thyroidectomy is performed. In 2011, autofluorescence of the parathyroid glands has been discovered by a team in Vanderbilt, Nashville. This unique autofluorescence property of the parathyroid glands which occurs at around 820 nm when excited by light at 785 nm, can be used to identify the parathyroid glands. Since this discovery, probe-based and camera-based devices that easily distinguish the parathyroid glands from the surrounding tissues have been developed. Image-based devices can also use indocyanine green (ICG) dye, which enables visualization of parathyroid-gland vessels and perfusion. Mapping angiography involves ICG injection at an early stage of dissection to visualize the vascular pedicle of the parathyroid glands and help preserve the vascular supply. Perfusion angiography estimates the perfusion of the remaining parathyroid glands based on ICG uptake on fluorescence imaging after thyroidectomy. The assessment of perfusion and thus viability of glands using ICG correlates with postoperative function. These new techniques to help detect and preserve parathyroid function during thyroidectomy will be described during this keynote lecture.

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR JEFFREY MARCUS (DURHAM, USA)

Keynote Lecture - Global Health, Plastic & Reconstructive Surgery, Craniomaxillofacial Surgery - Dobson 2

1:30 pm
Bilateral cleft lip repair
Jeffrey Marcus

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR PETER SAGAR (LEEDS, UK)

Keynote Lecture - Surgical Leaders, Colorectal Surgery, Medico-Legal, Younger Fellows, Senior Surgeons

Program - Conway 5

1:30 pm
The responsible surgeon: keeping out of trouble
Peter Sagar
Few careers can match the challenges, both technical and non-technical, and the variety of situations that we see during a career in surgery. Undoubtedly, the satisfaction of diagnosing and managing the wide range of conditions that we see together with keeping abreast of the ever-expanding body of knowledge can be matched by very few other professions. However, there are potential pitfalls along the way. Serendipity has directed my involvement with many cases where doctors have found themselves in difficulty and the aim of this presentation is to highlight some of the mistakes to be avoided as well as strategies to cope when the going gets tough.

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR TIM UNDERWOOD (SOUTHAMPTON, UK)

Keynote Lecture - Upper GI Surgery, Surgical Oncology - Conway 3

1:30 pm
Understanding and improving response to treatment in OG cancer
Tim Underwood

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR TIM WILKINSON (AOTEAROA NEW ZEALAND)

Keynote Lecture - Surgical Education - Dobson 3

1:30 pm
Programmatic assessment - lessons from implementation
Tim Wilkinson

---

07 May 2024

2:00 pm - 3:30 pm
ADRENAL

Scientific Session - Endocrine Surgery - Bealey 5

2:00 pm
AI for AIs
Brenessa Lindeman

2:15 pm
Robotic adrenalectomy
Tracy Wang

2:30 pm
Posterior retroperitoneoscopic adrenalectomy - tips and tricks
Nicole Rodrigues
The posterior retroperitoneoscopic adrenalectomy was first described by Martin Walz in 1994. It is becoming the standard approach to performing minimally invasive adrenalectomy due to its shorter operating times

and time to recovery. It can be challenging to learn in the initial period for the general surgeon accustomed to operating in the peritoneal cavity due to the smaller working space and lack of familiar landmarks. We describe our approach to performing this operation and provide tips and tricks that may help the surgeon starting out with this procedure.

2:45 pm
AVS - all for one approach?
Richard Carroll

3:00 pm
Discussion

2:00 pm - 3:30 pm
BREAST CANCER SURVIVAL

Scientific Session - Breast Surgery - Dobson 4

2:00 pm
This house believes that breast cancer survival is better following breast conserving surgery
Paul Samson, Chris Pyke

2:30 pm
Is it time to address the issue of patient choice for small early breast cancer?
Sanjay Warrier

2:50 pm
15-year trends in breast cancer management in Aotearoa New Zealand (NZBCF data)
Josie Todd

3:10 pm
Hormonal management of menopause in breast cancer survivors
Rhea Liang

2:00 pm - 3:30 pm
HEARING AND EAR HEALTH

Scientific Session - Otolaryngology Head & Neck Surgery - Bealey 4

2:00 pm
The Southern Cochlear Implant Programme - Ongoing Responsibility
Phil Bird

2:00 pm - 3:30 pm
HPB: A VIEW FROM THE PACIFIC

Scientific Session - HPB Surgery, Indigenous Health, Global Health - Conway 2

2:00 pm
HPB access and outcomes for Māori
Lisa Brown

2:15 pm
Te Poka Pū - Creating a safe pathway through surgical training and fellowship
Jamie-Lee Rahiri

2:30 pm
Management of liver abscess in the Pacific
Timoci Qereqeretabua

2:45 pm
Management of surgical jaundice in the Pacific
Ifereimi Waqaniabete

3:00 pm
My journey into Te Ao Māori
Vic Utley
A kōrero about my journey learning te reo Māori through night classes, noho marae, and a life changing immersion year after the birth of my fist pēpī. How I came to learn that my time sitting in te ao Māori was equally if not more important than my ability to speak the language. My whakaaro on how as a pākehā, a māmā and a doctor I feel this journey has enriched my personal and professional life, and the responsibility I feel to share this with those around me.

3:15 pm
Questions and panel discussion

2:00 pm - 3:30 pm
IMMUNOTHERAPY / MULTIMODAL THERAPY AND PROPHYLACTIC APPROACHES TO OG CANCER

Scientific Session - Upper GI Surgery, Surgical Oncology - Conway 3

2:00 pm
Trials updates
Iain Thomson

2:15 pm
Immunotherapy for surgeons
Tim Underwood

2:30 pm
New drugs and old ideas in resectrable OG cancer
Christopher Jackson

2:45 pm
Surgical management of familial gastric cancer
Ross Roberts

3:05 pm
Discussion

2:00 pm - 3:30 pm
PRESIDENT'S ROUND TABLE

Business Meeting - *Cross Discipline* - Dobson 1

2:00 pm
Challengers facing our community
Tania Fisher

2:00 pm - 3:30 pm

RECTAL CANCER

Scientific Session - Colorectal Surgery - Conway 5

2:00 pm
Overview of the changes in rectal cancer
Ian Faragher

2:12 pm
Tailoring treatment in rectal cancer
Michelle Vaughan
Rectal cancer has seen an explosion of data from new trials adding chemotherapy to (chemo)radiation before consideration of surgery. Just some of the trials include OPRA, PRODIGE 23, PROSPECT, RAPIDO and STELLAR. The trials all have different regimens and different toxicity, and they haven't yet been compared against each other. So which one is 'best'? I will go over a schema to help clinicians consider which regimens are 'best' for which patients, according to the clinical goal, patient and tumour characteristics.

2:24 pm
Getting the most out of MRI in rectal cancer
Verity Wood

2:36 pm
Selecting patients for lateral node dissection
Peter Lee

2:48 pm
Operative tips and concepts: what I wish I knew 10 years ago
Eugene Ong

3:00 pm
The endo-sponge for leaks
Deborah Wright

3:12 pm
Discussion

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - Craniomaxillofacial Surgery, Plastic & Reconstructive Surgery - Dobson 2

2:00 pm
History of Craniofacial Surgery: Pioneering Surgeons and Milestones
Jeremy Bishay
The beginnings Craniofacial surgery has undergone a remarkable transformation, evolving from ancient practices such as trephination and head binding into a highly specialised and innovative field. The roots of craniofacial surgery date back to 10000 BC, marked by the emergence of trephination to alleviate intracranial pressure (1). The 19th century witnessed breakthroughs in general anaesthesia and antibiotics, reshaping the field and enabling the treatment of craniofacial injuries, particularly among World War I soldiers. The evolution The evolution of craniofacial surgery continued with historical milestones, including Van Meekeren's bone graft attempt in 1682 and the complexity of facial injuries during World War II (1). Kazanjian and Converse's 1949 publication coincided with Sir Harold Gillies' pioneering of the Le Fort III procedure and advancements in cranioplasty materials (1). Obwegeser's 1969 work on midface advancement laid the groundwork for modern craniofacial care, while Verdi's 1991 report introduced dental implants as a game-changer for managing craniofacial anomalies (1). Modern day craniofacial surgery However, the true luminary was Paul Tessier, whose 1967 Rome presentation unveiled revolutionary techniques for patients with craniofacial dysostosis and major facial clefts, expanding the horizons of the field (1). Conclusion The history of craniofacial surgery reflects the dedication of pioneers like Tessier,

elevating the field into a sophisticated realm and improving the quality of life for patients with craniofacial disorders. References: Goodrich J. An annotated history of craniofacial surgery and intentional cranial deformation. Neurosurg Clin N Am. 2001; 12(1):45-68.

2:10 pm
Paediatric cranioplasty using autologous calvarial particulate bone graft
Ali Sarfarazi
Background Paediatric cranioplasty is critical for restoring cranial integrity and facilitating optimal neurodevelopment in children. Traditional methods, such as autologous bone flaps/grafts or synthetic materials, possess inherent limitations. This study outlines the use of autologous particulate calvarial bone grafts for paediatric cranioplasty at Auckland City Hospital, New Zealand. Methods: A retrospective analysis was conducted on seven paediatric patients who underwent cranioplasty using autologous particulate calvarial bone grafts in 2023 at Auckland City Hospital. The procedure involved harvesting calvarial bone, morselising it, and combining this with the patient's blood and fibrin glue to form a pâté used as an inlay graft. Data on patient demographics, indications, cosmesis, complications, and bone resorption were collected. Results: Seven patients, mean age of 2.7 years (three males, four females), underwent cranioplasty using the described method. Indications included trauma, congenital cranial abnormalities, and prior neurosurgical procedures. The mean operative time was 227 minutes, with a mean follow-up period of 8.6 weeks. All patients exhibited satisfactory cosmetic outcomes and no patients displayed bony resorption at the initial clinic follow-up. One patient developed a calvarial concavity due to excess ventricular shunting, though the underlying bone remained clinically solid. Conclusion: Our preliminary data demonstrates that autologous morselised calvarial bone graft is a safe and effective method for pediatric cranioplasty, offering an alternative technique for reconstructing cranial defects in this population. Long term follow-up and a larger sample size are needed to validate this technique.

2:20 pm
Midface advancement in Apert Syndrome: Follow-up more than three decades later
Roland Deek
BACKGROUND: Apert syndrome is characterised by craniosynostosis, a hypoplastic midface, skeletal abnormalities, symmetric syndactyly of the hands and feet, and a degree of neurocognitive impairment. Tessier advanced the surgical correction of facial deformity in Apert syndrome, with the goal of addressing obstructive sleep apnoea, deepening of the orbits to reduce ophthalmic complications, and improving the facial appearance. Long-term outcomes of patients who have undergone surgical correction of Apert syndrome are limited. We present the case of a 73-year-old female with Apert syndrome, with follow-up more than three decades following a fronto-orbital advancement and Le Fort III advancement as an adult. RESULTS: Early radiological images provide a glimpse into the advent of three-dimensional computed tomography reconstructions for craniofacial surgical planning. Subsequent clinical and radiological images demonstrate a degree of skeletal resorption and relapse that is likely unavoidable. This may be partly due to the patient being edentulous, although the underlying genetic defect and surrounding soft-tissue envelope are likely to play a role. CONCLUSION: The management of Apert syndrome remains challenging and requires a multidisciplinary protocol-based approach which continues to evolve. The case presented provides a unique insight into the long-term skeletal stability and aesthetic outcomes for patients with Apert syndrome.

2:30 pm
A Review of Midface Advancement: 75 years of progress
Roland Deek
BACKGROUND: Surgical advancement of the midface has undergone numerous modifications since its infancy 75 years ago, but remains a challenging and controversial area of surgery. We outline the timeline of advances in midface surgery and discuss the continuing importance of the historic context. METHODS: A literature search was completed. Search strategy included a combination of terms including midface advancement, osteotomy, Le Fort III, and distraction osteogenesis. RESULTS: The advent of midface advancement dates to a publication by Sir Harold Gillies and Stewart Harrison in 1949, with the description of an operation to reposition the recessed maxilla, noting an improvement in occlusion, proptosis, and overall facial configuration. Two decades later, Joseph Murray and Lennard Swanson, described a Le Fort III midface advancement with an additional head cap for stabilization. This was the year of Tessier's historic presentation at the International Meeting of Plastic Surgery in Rome in 1971, a critical moment for the field of craniofacial surgery. Ortiz-Monasterio popularised the monobloc osteotomy for the correction of Crouzon deformity, whilst Synder used a canine model to demonstrate distraction osteogenesis. Twenty-years later, McCarthy would use this technique to lengthen the mandible in hemifacial microsomia, and Chin and Toth would use internal distraction devices in maxillofacial surgery. CONCLUSION: Although management of midface retrusion has been challenging, significant advancements have been made, and they continue to

have relevance for today's surgeons.

2:40 pm
Posterior Vault Distraction
Anika Radojkovich
Purpose: Posterior vault distraction (PVD) has become increasingly accepted as the gold-standard treatment for multisutural and bicoronal craniosynostosis. It provides a significant increase in intracranial volume and improves morphology of the craniosynostosis. We conducted an analysis of the outcomes of PVD at our centre. Method: Patients at Starship Children's Hospital who underwent PVD from January 2014 to June 2023 had their clinical notes and photography reviewed retrospectively. Data was gathered regarding the indication for the procedure, success in addressing this indication, improvement in appearance and associated complications. Results: During this review period, we performed 25 PVDs in 24 patients. In 23 patients, there was bicoronal or multisutural craniosynostosis and five patients had raised intracranial pressure (ICP) at the time of surgery. Of the patients with raised ICP, one required a second PVD but no others have required further procedures related to ICP. Of the patients with an initially normal ICP, three required further surgery for concerns of raised ICP. Complications included pin site infections that were managed with antibiotics, four episodes of metalware complications in three patients requiring return to theatre, soft spots that did not require treatment in three patients, dural tears and a small extradural haematoma. Conclusion: Our outcomes with PVD show it is a successful and safe procedure for addressing craniosynostosis.

2:50 pm
Three-dimensional planning in craniomaxillofacial surgery
Atulkrishna Kizhakedath

3:00 pm
Outcomes in Primary Neonatal and Secondary Paediatric Mandibular Distraction
Jae Hyun Jeong
Purpose: Retrognathia and glossoptosis can cause airway obstruction in the neonatal and paediatric populations. Critical cases require intubation and consideration of tracheostomy. Mandibular distraction (MD) aims to alleviate airway obstruction by advancing the mandible and attaching soft tissues anteriorly. Successful secondary MD allows decannulation of tracheostomy. MD in retrognathic neonates with severe airway obstruction can prevent the morbidity associated with a tracheostomy. Methodology: Patients who underwent MD over the years 2013-2023 at our tertiary paediatric centre were identified. Patient characteristics, indications for surgery, and time between MD and successful tracheostomy decannulation were recorded from electronic health records. MD-specific complications were identified. Results: Of 9 patients who underwent MD, 2 underwent primary neonatal MD, avoiding tracheostomy. 7 underwent secondary MD following tracheostomy. Three patients had a syndromic association, of which two had Treacher-Collins syndrome. The mean follow-up period was 7.7 years. The average age at tracheostomy was 13.7 weeks. The average age at mandibular distraction was 0.1 and 2.3 years for primary and secondary MD cases respectively. For secondary MD cases, the average time from MD to decannulation was 59.8 weeks. One patient failed to decannulate, after two separate mandibular distractions. For primary MD cases, the average time from MD to spontaneous ventilation was 1.7 weeks. 3 patients had MD-specific complications, of which two had crossbite, and one with unilateral mandibular non-union. Conclusion: In a selective group of neonatal patients MDO can successfully relieve airway obstruction and avoid the requirement of tracheostomy.

3:10 pm
Allograft vs Cadaveric cartilage graft for rhinoplasty and nasal reconstruction
Lucinda Van de Ven
Background Cartilage provides the structure of the nose and is an essential consideration in nasal surgery. Autologous costal cartilage is considered the gold standard as it is thought to be cheaper and safer than cadaveric alternatives. However, the time for harvest and the morbidity of the donor site has meant cadaveric cartilage has become increasingly popular. This review seeks to evaluate these two cartilage sources, examining safety, efficacy and cost. Methods A review of cartilage graft options for rhinoplasty and reconstruction was undertaken. Results Numerous case series and studies have compared cartilage options. A recent study looked at 54 studies and included 888 patients, with 741 receiving autologous grafts whilst 153 received cadaveric. There was no statistically significant difference in warping, resorption, contour irregularity, infection and revision surgery. These results are consistent with other single centre studies. The reduction in theatre time through using cadaveric graft and the absence of donor site morbidity, may offset its high expense. Conclusion Current literature suggests that there is no difference in outcomes between autologous and cadaveric cartilage grafts. Whilst higher quality studies are needed, the potential of

cadaveric cartilage grafts suggests that they can be safely used and may even have a role to play in reconstruction more generally.

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - General Surgery - Bealey 3

2:00 pm
Patient grit is associated with surgical recovery: a prospective study
Joshua Kovoor
Background Recovery and outcomes after surgery cover physical and mental dimensions. Grit, or perseverance and passion for long-term goals, is an important psychological trait, for which association with surgical recovery has been infrequently studied. Accordingly, this study aimed to evaluate the potential association between patient grit, and quality of recovery after surgery. Methods This prospective study included surgical inpatients, recruited at the Queen Elizabeth Hospital in South Australia, over a two-week period in July 2023. Linear regression analyses evaluated associations between the total scores, and individual components, of the validated Short Grit Scale (SGS) and the short-form of the Quality of Recovery Score (QoR-15). Results A total of 31 surgical patients were included. The mean total SGS across the cohort was 3.613 out of 5 (SD: 0.5759), and the mean total QoR-15 was 104.1 out of 150 (SD: 27.75). There was a statistically significant, and positive, association between total SGS score and total QoR-15 score (estimate: 0.01434, SE: 0.002787, 95%CI: 0.008640 to 0.02004, |t|: 5.146, p<0.0001). Similarly, several statistically significant associations were found in the linear regression analyses of the SGS, QoR-15, and the individual components of the other questionnaire. Conclusions This is the first prospective study to use validated tools to demonstrate that higher levels of surgical patient grit may be associated with better quality of postoperative recovery. Future research and clinical practice should seek to investigate consideration of the grit levels of surgical patients within perioperative care.

2:10 pm
Achieving Equity: Patient Demographics and Outcomes after Surgical and Non-Surgical Procedures in South Australia, 2022
Joshua Kovoor
Background To improve health equity, this study aimed to identify patient demographic characteristics that might predict disparities in mortality, readmission, and discharge outcomes after either an operative or non-operative procedural hospital admission. Methods This retrospective cohort study included all surgical and non-surgical procedural admissions at three of the four major metropolitan public hospitals in South Australia in 2022. Multivariable logistic regression, with backwards selection, evaluated association between patient demographic characteristics and outcomes up to 90 days post-procedurally. Results 40,882 admissions were included. Increased likelihood of all-cause, post-procedure mortality in-hospital, at 30 days, and 90 days, were significantly associated with increased age (p<0.001), increased comorbidity burden (p<0.001), an emergency admission (p<0.001), and male sex (p=0.046, p=0.03, p<0.001, respectively). Identification as ATSI (p<0.001) and being born in Australia (p=0.03, p=0.001, respectively) were associated with an increased likelihood of 30-day hospital readmission and decreased likelihood of discharge directly home, as was increased comorbidity burden (p<0.001) and emergency admission (p<0.001). Being married (p<0.001) and male sex (p=0.003) were predictive of an increased likelihood of discharging directly home; in contrast to increased age (p<0.001) which was predictive of decreased likelihood of this occurring. Conclusions This study characterised several associations between patient demographic factors present on admission and outcomes after surgical and non-surgical procedures, that can be integrated within patient flow pathways through the Australian healthcare system to improve healthcare equity.

2:20 pm
The rising incidence of Early onset colorectal cancer in Aotearoa New Zealand: Changing trends from 2000-2020.
Oliver Waddell
Background The incidence of early-onset colorectal cancer (EOCRC), has been rising in many countries for the past few decades, including in Aotearoa New Zealand. The aim of this study was to determine recent trends in EOCRC incidence and likely trends for the future. Methods The national cancer registry was used to identify cases of CRC in AoNZ from 2000-2020. We analyzed the trends in incidence of CRC by age, sex, and ethnicity and used this to make projections to 2040. Results Overall age-standardized incidence rate of

CRC decreased from 61.0 to 47.3 cases per 100,000 (P=8.2x10-80). In those under 50 years, the incidence increased on average by 26% per decade (incidence rate ratio (IRR) 1.26, p=<0.0001), while for those aged 50-79 years it decreased (IRR 0.82, p=<0.0005), with no overall change in those over 80 years. Māori, have had a significant increase in overall incidence (IRR 1.28, p=<0.0005) driven by significant increases in EOCRC (IRR1.36, p=<0.0005). By 2040, we predict the incidence of EOCRC will have risen from 8.00 to 14.9 per 100,000 (6.33 to 10.00 per 100,000 in Māori). However, due to the aging population we estimate 43.0% of all CRC cases will be diagnosed in those over 80. Conclusion The incidence of EOCRC in AoNZ continues to climb with greater rises seen in Māori. The impact however of an ageing population, will see CRC in the elderly continue to dominate case numbers.

2:30 pm
Not just a number: A detailed evaluation of the impact of patient age on general surgery outcomes
Joshua Kovoor
Background As the population ages, the impact of increasing patient age on surgical outcomes needs to be better elucidated. This study aimed to conduct a detailed evaluation of the impact of patient age on general surgery outcomes. Methods Emergency and elective admissions under general surgery services at two hospitals in South Australia between 2017 and 2023 were included. Regression models were performed for the predictor of age, adjusted for confounders of sex and admission type. Outcomes included length of hospital stay, in-hospital mortality, surgical complications, and complication grade. For each outcome, three models were performed, examining continuous age, comparing below and over 18 years of age, age in 10-year categories. Results 43,633 general surgery admissions were included. For each 10-year increase in patient age, mean length of hospital stay increased by 14% (mean ratio 1.14, 95%CI 1.13–1.14), odds of in-hospital mortality more than doubled (odds ratio 2.07, 95%CI 1.91–2.24), odds of experiencing a complication increased by 25% (odds ratio 1.25, 95%CI 1.23–1.26), and odds of experiencing a higher complication grade increased by 10% (odds ratio 1.10, 95%CI 1.08–1.12). Each 10-year age category was a statistically significant predictor of length of hospital stay (p<0.0001), in-hospital mortality (p<0.0001), presence of complications (p<0.0001), and complication grade (p<0.0001). Conclusions Not only is patient age strongly associated with general surgery outcomes, but outcomes incrementally worsen as patient age increases. Going forward as the population ages, surgical systems of care should further integrate patient age within clinical decision-making and future research.

2:40 pm
CT Derived 3D Lumbar 3 Body Composition – A New Tool to Predict Postoperative Outcomes Following Emergency Laparotomy
Chui Foong Ong
Purpose: Sarcopenia is associated with higher mortality and morbidity in elective abdominal surgery, however the effect of body composition on emergency laparotomy (EL) remains insufficiently explored. This study evaluated the impact of 3D body composition, diagnosed from multiple lumbar 3 vertebral CT scans on EL surgical outcomes. Methodology: Retrospective analysis of ANZELA-QI patients treated at a tertiary Australia hospital was conducted. Sarcopenia was defined based on the lowest quartile for skeletal muscle radiodensity, Hounsfield Unit (HU). Multiple CT slices at the third lumbar vertebrae using a validated artificial intelligence segmentation model was used for body composition analysis. Results: A total of 297 patients were included (2018-2023; most common surgical procedures included colectomy (28.3%), adhesiolysis (20.5%) and small bowel resection (14.5%)). A total of 2844 CT slices were analysed, with a mean ± standard deviation of 9.6 ± 3.5 slices per patient. Sarcopenia, average radiodensity of L3 muscles (HU≤ 25.27), was significantly associated with age (76 vs 58 years; p < 0.001), increased length of stay (24 vs 14 days; p < 0.001), increased need of postoperative care in intensive care unit/high-dependency unit, severe complications (Clavien-Dindo ≥ 3) (p = 0.02) and higher level of care discharge disposition (p < 0.001). Additionally, sarcopenic patients had significant higher volumes of adipose tissue (Visceral Adipose Tissue p < 0.001; Subcutaneous Adipose Tissue p < 0.02). Conclusion: Sarcopenic patients are associated with higher fat volumes and significantly worse postoperative outcomes. CT-derived 3D lumbar body composition may be a future valuable tool in risk stratification for EL patients.

2:50 pm
Validation of the METABOLICS (1) score - Predicting hospital impact of index laparoscopic cholecystectomy
Carys Finlayson
Purpose: To establish whether a ten-factor METABOLICS score can predict hospital impact of Index Laparoscopic Cholecystectomy (ILC) Methodology: Patients who underwent ILC at MMH in 2022 were analysed. Low METABOLICS was defined as a score of 0-2 and high METABOLICS >2. Hospital impact was determined by length of stay (LOS), operating time (OT), number of investigations, and major complications. Statistical analysis was performed using R. Statistical methods included independent t-tests for continuous variables and Fisher's exact test for binary variables. Multivariate regression analyses were performed.

Results: Of 457 patients in the cohort 149 patients were in the low METABOLICS group and 308 patients were in the high METABOLICS group. Compared to low METABOLICS, high METABOLICS had a longer LOS (MD 1.74 days, p < 0.0001), longer OT (MD 16.51 minutes, p < 0.0001) and more investigations (MD 2.72 investigations, p < 0.0001). Low METABOLICS had a non-statistically significant reduction in odds of a major complication (OR = 0.50, 95% CI 0.14-1.41, p = 0.19). There were 3 (0.6%) conversions and one minor CBD injury. Multivariate linear regression analyses were significant for LOS (p < 0.0001), OT (p < 0.0001), and number of investigations (p < 0.0001). Conclusions: • High METABOLICS score had a significant hospital impact compared to low METABOLICS score. This was shown across LOS, OT time and number of investigations. • The awareness of a high METABOLICS risk may help reduce complications. 1. Hutchinson A, Wratten-Stone A, Poole G. “M.E.T.A.B.O.L.I.C.S”: A hospital impact score (HIS) for index laparoscopic cholecystectomy. (2023), Abstract Journal General Surgery. ANZ Journal of Surgery, 93: 56-83

3:00 pm
Predicting the need for opioids at discharge after surgery: development and validation of a machine learning algorithm in an international cohort
Chris Varghese
Introduction The ‘Opioid PrEscRiptions and usage After Surgery’ study found opioids are significantly overprescribed after surgery. Inappropriate prescribing contributes to opioid-related harm including excess circulation of unused opioids within our communities. This study aims to use novel methods to predict if patients require opioids after surgery. Methods An international, multi-centre, prospective cohort study of general surgical, urological, gynaecological, and orthopaedic surgery was performed by the TASMAN collaborative. Random forest machine learning algorithms were used to predict the need for opioid at discharge, and a 80:20 training/testing split was used for validation. Results Of 4268 patients recruited across 24 countries (mean age 50; 51.9% female), 1308 (30.6%) were prescribed opioids, but only 1014 (23.8%) consumed them. Our model ranked the total amount of opioids consumed in the day prior to discharge, alcohol consumption, surgery-type, smoking status, and age as the most important factors. Area under the curve for the random forest model was 0.84 (95% CI 0.83-0.84; compared to 0.76 (95% 0.76 - 0.77) in a logistic regression model). Model sensitivity was 92%, specificity 49%, and overall accuracy was 82% (95% CI 79 - 84%). Conclusions The need for an opioid prescription could be accurately predicted using 11 routinely available preoperative variables (age, gender, alcohol intake, smoking status, BMI, surgery-type, ASA score, indication for surgery, urgency, total amount of opioids consumed the day before discharge, and pre-admission opioid use). Future work could enable clinical translation of this decision support aid to rationalise opioid overprescribing after surgery.

3:10 pm
Do men over 50 undergoing index admission laparoscopic cholecystectomy, with evidence of liver damage, experience worse perioperative outcomes?
Gabriella Donaldson
Purpose: Most patients undergoing index admission cholecystectomy (ILC) have some degree of acute liver function abnormality. Aging males have a threefold incidence of background liver dysfunction. This study was designed to quantify the perioperative impact of males over fifty with evidence of liver damage (ELD). Methodology: ILC cases performed at Middlemore Hospital in 2022 were retrospectively analysed. A patient subgroup including men over 50 with ELD was compared to the remaining cohort. Four outcomes were analysed: Length of stay (LOS), operating time (OT), number of investigations, and major complications. Statistical methods included independent t-tests, Fisher’s exact test, and multivariate regression modelling. Results: Of 457 patients who underwent ILC, 66 patients were men over 50 with ELD. The 391 remaining patients were the comparison group. Men over 50 with ELD experienced a longer LOS (MD 1.57 days, p = 0.002, 95% CI 0.58 to 2.56 days), longer OT (MD 9.22 minutes, p = 0.027, 95% CI 1.05 to 17.39 minutes), underwent more investigations (MD 2.77 investigations, p = 0.00045, 95% CI) and had increased odds of a major complication (OR = 3.02, p = 0.018, 95% 1.08 to 7.81). Multivariate linear regression models were significant for LOS (p < 0.0001), OT (p = 0.0016) and number of investigations (p < 0.0001). Conclusion: Men over 50 with ELD experienced increased LOS, OT, number of investigations, and had an increased likelihood of a major complication when undergoing ILC. Acute service co-ordination and peri-operative counselling for these patients should factor in these results and the increased likelihood of deviation from routine recovery.

3:20 pm
Which Risk Factor made the Peptic Ulcer Pop? And was it Methamphetamine Use?
Renae Bertucci
Purpose: To review the risk factors of perforated peptic ulcers (PPU) and compare the rate of intravenous methamphetamine use in these patients with the rate of use within Queensland’s adult population (1.5%). Smoking, alcohol and non-steroidal anti-inflammatory drugs (NSAIDs) have been described as risk factors

for peptic ulcer disease (PUD), however limited evidence suggests linking methamphetamine use to PPU. (1) Methodology: 400 patients presenting to Townsville University Hospital with PUD between 2017-2023 were included in this retrospective cohort study. Electronic medical records were reviewed for demographics, risk factors, management and outcomes. Total 61 were determined to have a PPU. Results: Intravenous methamphetamine users accounted for 7.3% (n=7) of presentations. In the non-intravenous drug use population, smoking (56.8%), NSAIDs (40.9%) and alcohol consumption (40.9%) were considered the most common risk factors. The methamphetamine subgroup however comprised of smokers (100%), alcohol users (85%) and only 14.3% NSAID users. Methamphetamine users were also more commonly male and younger than the comparative population (median age 33 years-old vs. 61.5 years-old). Median hospital length of stay and complication rate including re-operation was comparable between the groups. Conclusions: This study identified risk factor trends and that rates of IV methamphetamine use were greater in the PPU group versus the general population. Whilst unable to demonstrate causation, by increasing awareness, this may enable surgeons to identify at-risk patients, improve surgical outcomes and reduce re-perforation. References: 1. Queensland Health, Tobacco, alcohol and illicit drug use in Queensland 2016. Analysis of the AIHW National Drug Strategy Household Survey 2016. Brisbane 2019

2:00 pm - 3:30 pm
RESHAPING TRAINING FOR LEARNERS' SUCCESS

Scientific Session - Surgical Education, Women in Surgery - Dobson 3

2:00 pm
Ensuring trainee progression: exploring learner neglect and failure to fail
Joy Rudland

2:15 pm
The greatest obstacle to becoming a surgeon was being a woman
Shelley McKellar

2:30 pm
What do trainees think about flexible training?
Carina Cutmore

2:45 pm
Dealing with difficulty - using motivational interviewing to get trainees back on track
Brenessa Lindeman

3:00 pm
Discussion

2:00 pm - 3:30 pm
THE PAUL O'BRIEN AWARD FOR CLINICAL RESEARCH IN BARIATRIC SURGERY SESSION

Scientific Session - Bariatric Surgery - Conway 1

2:00 pm
Selective vs. routine pre-operative endoscopic screening for sleeve gastrectomy.
Yazmin Johari
Introduction: Current international guidelines recommended routine pre- and post-operative endoscopy for sleeve gastrectomy (SG) due to potential risks of Barrett oesophagus (BO) and oesophageal adenocarcinoma. However, the benefit of routine pre-operative endoscopy remains unclear. Aims: To determine whether pre-operative endoscopy results in material changes to the surgical plan or difference in post-operative endoscopic outcomes. Method: Part 1 – We compared endoscopic outcome between the post-SG endoscopic outcome between those who had pre-operative endoscopy (Pre-op, N=222) and those who did not (NoPre-op, N=872). Part 2 - We prospectively analysed consecutive endoscopies pre-SG (N=509) vs. post-SG (N=1094). Regression analysis used to determine factors associated with BO. Results: Part 1 - Preop group's BO rate was 4.9%, oesophagitis 22.2%. Patients from both groups underwent laparoscopic SG.

Post-operative endoscopy performed at 1.9+/-1.2 vs. 2.1+/-4.5 years (p=0.468). There was no difference in prevalence of BO (4.1vs.3.7%, p=0.788), oesophagitis (p=0.474), severity of oesophagitis (p=0.466), or hiatus hernia (p=0.619). Part 2 - Post-operatively, hiatus hernia (p<0.001), cardia effacement (p<0.001), and bile stasis (p<0.001) were more prevalent. The prevalence and severity of oesophagitis were similar (p>0.05). Barrett's rates were similar (3.9%vs.3.7%, p=0.860). Conclusion: No material changes to the surgical plan occurred due to the pre-operative endoscopy findings. Post-operative endoscopic outcomes were favourable regardless of having pre-operative endoscopy. Therefore, selective pre-operative endoscopy screening for those symptomatic or high-risk for BO maybe more helpful.

2:15 pm
Choosing wisely: how My PreHab Program screens for surgical risk to support better outcomes
Eleanor Bills

2:30 pm
Effect of Laparoscopic Sleeve Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Body Composition
Qianyu Chen
Purpose: There is a scarcity of data on body composition changes after the two most widely performed bariatric procedures -- laparoscopic sleeve gastrectomy (SG) and laparoscopic Roux-en-Y gastric bypass (RYGB). The objective of this study was to analyse the changes in body composition between these two procedures during the first year after surgery. Methods: A prospective cohort study was performed in patients undergoing bariatric surgery at two tertiary hospitals between 2017 and 2023. Body composition was assessed with dual-energy X-ray absorptiometry immediately before surgery, and at 1, 6, 12, 18 and 24 months post-operatively. Total weight loss (TWL), excess weight loss (EWL), body mass index (BMI), fat mass (FM), lean body mass (LBM) and bone mineral content (BMC) parameters across the study period were compared between SG and RYGB. Results: Forty-five patients were included (RYGB n = 30, SG n = 15). There was a significant reduction in mean %TWL of 26.94 ± 8.86% and mean BMI of 11.12 ± 3.70 kg/m2 over 12 months. LBM accounted for 17.8% of TWL over 12 months, SG and RYGB did not differ in terms of loss of FM or LBM. For both procedures, the loss of LBM appeared to plateau at 6 months post-operatively. The only statistically significant finding between the two procedures was that RYGB resulted in an additional 0.06 kg loss compared with SG. Conclusion: LSG and LRYGB were shown to have comparable body composition changes in the short-to-medium term period following surgery. Given that there is a significant reduction in LBM which predominantly occurs in the early post-operative period, further research is warranted to implement a structured exercise and nutritional program during this window to mitigate LBM losses.

2:45 pm
The safety of resistance training in addressing postoperative sarcopenia following bariatric metabolic surgery
Ruben Schuringa, Ruben Schuringa
Purpose: In the first month following bariatric metabolic surgery, patients can expect approximately half of their weight loss to consist of lean body mass. In addressing this muscle loss, current guidelines encourage patients to maintain adequate protein intake but suggest that patients avoid or limit resistance training until recovering from surgery. This review aims to evaluate the level of evidence suggesting adverse outcomes associated with physical exercise in the immediate postoperative period following bariatric metabolic surgery. Methodology: We systematically searched the literature for evidence suggesting a relationship between postoperative complications and the level of exercise completed immediately following bariatric metabolic surgery. Results: Of the 39 included studies on postoperative exercise, none suggested postoperative exercise as a risk factor for complications following bariatric metabolic surgery. Conclusion: Following bariatric metabolic surgery, there may be substantial benefit to engaging in low-impact resistance training in addressing resultant sarcopenia. This review found no association between the level of postoperative exercise and the incidence of complications. Based on our analysis of the available literature, we suggest that low-impact resistance training is safe in the immediate postoperative period following bariatric metabolic surgery. Future clinical trials involving supervised low-impact resistance training will likely be safe and allow us to provide evidence-based recommendations on postoperative resistance training in this patient population.

3:00 pm
Argon Plasma Coagulation procedure for treatment of weight recidivism following Roux-en-Y bariatric surgery: a systematic review of randomised controlled trials
Isobel Hymer

2:00 pm - 3:30 pm

WHAT WOULD I TELL MY YOUNGER SELF - INSIGHTS FROM LEADERS IN THEIR FIELD

Scientific Session - Plastic & Reconstructive Surgery, Medico-Legal, Senior Surgeons Program, Trainees Association, Younger Fellows, Surgical Leaders, Burn Surgery - Conway 4

In a unique session involving the Trainees Association, Younger Fellows and Senior Surgeons, leaders in the field will provide insight into 'what they would tell their younger selves' - insight valuable to everyone no matter what stage of the career they are in. Tying all these stories together will be Dr Suzanne Hamilton - head of a mentoring programme at Christchurch Hospital.

2:00 pm
Aim low, expect the worst, avoid disappointment - Stoicism in healthcare
Peter Dziewulski
Lessons learned from 40 years as a doctor managing personal, patient and colleagues expectations in a continually changing and challenging health care landscape.

2:15 pm
The best laid schemes gang aft agley - reflecting on academia vs. clinical practice vs. life
Andrew Hart
In this rare opportunity to speak to a topic that really matters, I hope to reflect on a career in microsurgical reconstruction, academia, and peer review publishing to finally crystallise where I went wrong. Perhaps my thoughts could spare you some pain, help you achieve more, or just reassure that maybe you are actually as good as your mum says you are.

2:30 pm
Plastic surgery - the journey so far
Steven Williams

2:45 pm
What would I tell my younger self
Karen Smith

3:00 pm
Mentoring - why bother?
Suzanne Hamilton

3:15 pm
Discussion

---

07 May 2024

4:00 pm - 5:30 pm
FACIAL PARALYSIS

Scientific Session - Craniomaxillofacial Surgery, Plastic & Reconstructive Surgery - Dobson 2

4:00 pm
The motor matters - the power source for facial reanimation
Jeffrey Marcus

4:45 pm
Facial Reanimation: Selective Reinnervation of Facial Subunits
Shamir Chandarana

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Breast Surgery - Dobson 4

Presentation marked with an asterik (*) is not eligible for prize consideration.

4:00 pm
Causes of unwarranted variation in breast cancer management in regional and rural areas
Chantal Campbell
Introduction: Breast cancer management is complex, requiring personalised care from multidisciplinary teams. Management disparities exist between rural and metropolitan areas in treatments and outcomes. This study aims to determine the clinical and non-clinical factors contributing to unwarranted variation in breast cancer management in regional patients. Methods: Comprehensive data from patients who had primary breast cancer surgery from 2010-2014 in either a rural or metropolitan location in a single local health district were analysed (n = 686). Records were subset into two rurality groupings based on the postcode in which the patient resided, and the Modified Monash Model, an Australian system for classifying rurality. Outcomes included treatments received, pathway timeliness, recurrence, and survival. Results: Rural patients had higher mastectomy rates than metropolitan patients (57% vs 34%, $p < 0.001$), despite a lack of difference in clinical or demographic factors accounting for such variation. Time between treatment pathway stages was consistently longer amongst rural patients ($p < 0.01$). Rural women also had worse survival outcomes, especially amongst HER2-positive patients who had significantly lower survival (5-year 74% vs 82%; 10-year 49% vs 71%, $p < 0.05$) than metropolitan HER2-positive patients. Conclusion: This study reveals clinical disparities among rural breast cancer patients, that cannot be explained by demographic and clinical factors alone. Rural patients experience lower rates of breast conserving surgery and delays in treatment milestones, highlighting systemic barriers. The findings have important implications for improving equity and collaboration in delivering person-centered breast cancer care.

4:09 pm
Incidence and predictors of axillary lymph node metastases in women over 74 years with early breast cancer
Katherine Grant
Purpose: Investigate incidence of axillary lymph node metastases in early breast cancer in women >74 years Australia and New Zealand and identify predictors for lymph node positivity in each age group with the aim of reviewing likelihood of sentinel lymph node (SLN) positivity in early breast cancer in patients >74 years to assist clinician decision making when considering SLN biopsy in this population. Methodology: Retrospective review of invasive breast cancer in females in Australia and New Zealand between 2010-2022 using BreastSurgANZ Quality Audit Database. Data included patient demographics, tumour type, surgery type, neoadjuvant and adjuvant therapies. Descriptive and exploratory analyss of incidence of axillary lymph node metastases in various patient and tumour groups, followed by univariate logistic regression to identify predictors of SLN positivity, p value < 0.05 considered significant. Results: Review of 127,436 cases of invasive breast cancer, of which 17,599 were >74 years. Two thirds (66%) of the overall population and in those >74 years were node negative. In patients >74 years with T1a-b cancers 91% were node negative. In patients >74 years with grade 1-2, T1a-b cancers, ER+/HER2- without lymphovascular invasion, 94% were node negative. Tumour size, grade and biomarker profile correlated with axillary lymph node status ($p<0.05$). Conclusion: More than 90% patients in BQA dataset with early breast cancer and favourable features (Grade 1-2, T1a-b, ER+/HER2- and no lymphovascular invasion) were node negative. Therefore, routine surgical axillary nodal staging in this group of patients needs to be reconsidered.

4:18 pm
The Australian Breast Device Registry (ABDR): insights from seven years of follow up
Melanie Walker
Purpose The ABDR is a clinical quality registry that was rolled out across Australia in 2015 with funding from the Commonwealth Department of Health. Over seven years it has provided a valuable resource to monitor the long-term safety and performance of breast implants, tissue expanders and matrix/mesh. Reports generated by the ABDR facilitate healthcare decision-making, industry based post-market surveillance and academic research. Methodology This presentation is based on the findings from the 2022 Annual Report, where the analysis is stratified by indication for surgery: cosmetic and reconstruction. It includes 87,339 patient records, employing descriptive statistics and time-to-revision analysis. Results The ABDR reported 100,114 procedures since 2012, with an overall device capture rate in 2022 of 76.3%. All cause revision rates for reconstructive post cancer procedures was 20% at 7 years, with revisions due to device malposition and capsular contracture being 5.7% and 5.9% respectively. Revision rates for post cancer reconstructive procedures have decreased from 3.8% in 2016 to 2.2% in 2022. All cause revision incidence rates for cosmetic implants at 7 years was 6.3%. The ABDR was notified of 5 cases of BIA-ALCL in this reporting period. Cases

were most commonly reported 7-10 years post insertion, with the most common clinical issue associated being seroma/haematoma. Conclusions The ABDR has strong support amongst patients reflected in a consistently low opt-out rate of less than 1%. Surgeons are encouraged to report on their device revision and explantation procedures to ensure the ABDR is well placed to map device longevity and emerging trends in device related complications.

4:27 pm
Triple Negative Breast Cancer: Trends in older patients
Kimberley Tan
Purpose Triple negative breast cancer (TNBC) is an aggressive type of breast cancer that constitutes up to 12-20% of breast cancer cases worldwide. TNBC predominantly affects younger women, and only 25% of those above 65 years. However, with aging demographic, these numbers are likely changing. The aim of this study is to evaluate our local rates of TNBC, its tumour characteristics, and specifically focussing on the morbidity and mortality in older age groups. Methodology A retrospective assessment of data from patients with TNBC from January 2018 to March 2023 at the Northern Adelaide Local Health Network (NALHN) in South Australia was undertaken. This was obtained from electronic medical records and data requests from Breast Surg ANZ. The clinicopathological characteristics, treatment details and long-term survival were analysed and compared. Results There were 84 patients with TNBC out of a total cohort of 674 patients (12.5%). Patients >65 years of age accounted for 40.5% of TNBC, similar compared to 39.5% of cases in the total cohort. Our rates of patients over 65 years with TNBC is significantly higher than that in literature which reported between 10-21%. The recurrence rate was 6% (5 cases) and all occurred in patients age >65 years. Neoadjuvant chemotherapy was given to 45 patients, with only 15.6% (7 cases) of patients being over 65 years of age. Conclusion There is a higher proportion of TNBC patients over 65 years in our cohort compared to international data. The management of TNBC is challenging in this demographic and is characterised by less treatment compared to younger patients. This conservative approach has been shown to result in poorer breast cancer-specific survival in older patients.

4:36 pm
Outcomes on the use of tissue expander in two stage breast reconstruction
Rebecca Cui
Purpose The rates of patients undergoing implant based breast reconstruction following mastectomy is steadily increasing in Australia with studies of the Australian Breast Device Registry showing the majority of prosthetic based breast reconstruction being performed is two-staged or delayed reconstruction with tissue expanders (TE), when compared to direct to implant reconstruction (DTI). The literature shows an overall a decreased patient satisfaction with TE when compared to DTI. Furthermore, there is increasing use of magnetic resonance imaging (MRI) for breast cancer surveillance, and currently available TE contain magnetic ports which make them MRI unsafe. Methodology Retrospective single-centre study at Chris O'Brien Lifehouse of consecutive patients undergoing TE based breast reconstruction within a 24 month period from September 1 2021 - Sept 1 2023. BREAST-Q patient-reported outcome measure (PROMs) are performed at 2-6 weeks and 1 year post-operatively and these outcomes will be reviewed. Method of surveillance imaging use will be collated, with any delay to imaging and diagnosis of recurrence. Results Approximately 60 patients will have undergone TE based breast reconstruction over this period at our institution. The authors are currently collecting the PROM data and data on delay on surveillance imaging. Conclusion. With the increasing rates of post-mastectomy breast reconstruction, and especially TE based reconstruction in Australia it is important to assess patient reported outcomes following surgery, as well as complication rate. Furthermore, with the increasing use of MRI in the surveillance of breast cancer, it is crucial to assess if there is delay to imaging due to the presence of a TE.

4:45 pm
Predictors of patients requiring re-excision following breast conserving surgery
Andrew Beatty
Purpose Oncological outcomes of breast conserving surgery (BCS) when combined with radiotherapy is equal to mastectomy in the treatment of breast cancer. The past two decades have seen an expansion and uptake of oncoplastic techniques to improve aesthetic outcomes while maintaining oncological safety. However, complete surgical excision of the malignancy is an essential component and every year a significant portion of patients require further surgery to ensure adequate clearance. This study aims to determine the risk factors associated with a higher re-excision risk in patients with breast cancer. Methods Retrospective study of women who underwent BCS at the Royal Brisbane and Women's Hospital between 01/01/2012 and 31/12/2022. Patient age, method of localization, histological subtype, overall tumour stage and preoperative imaging were analysed. Resections for invasive ductal, lobular and DCIS were included. Results Across the 11-year study period 966 were included. Almost a third (32.2% n=311) required a re-excision, of which 57.2% had residual disease. Overall, the need for a re-excision was highest in patients who underwent

a palpable wide local excision (33.5%) compared to ROLLIS (26.5%) or Wire guided (31.8%). DCIS was the most common histological subtype to require re-excision (47.1%). After the ASCO revision of DCIS margins in 2016 there was an overall reduction in re-excision rates from 37.2% to 29.1%. Conclusions The need for re-excision remains a risk in patients undergoing BCS. The use of localisation (wire or ROLLIS) reduces but does not eliminate this risk. DCIS remains the most likely to require further surgery.

4:54 pm
Immediate autologous fat grafting in breast conservation surgery: early operative and oncologic outcomes
Tia Morosin
Purpose: Immediate autologous fat grafting (AFG) is a volume replacement technique that is used at the time of breast conservation surgery (BCS). Although there is reported experience from Europe and South America, there has yet to be reported Australian experience. This study evaluates the operative and short-term oncologic outcomes of this technique, and describes patient, breast and disease factors associated with its utilisation. Methodology: A retrospective review of demographic, operative and oncologic data for consecutive cases of immediate AFG by a single surgeon was completed. Results: There were sixty cases between Feb 2021 and Dec 2022, with a median age of 53.9 (range, 26-84). Immediate AFG was primarily used in patients with C cup breast size (n=17, 27.90%) and upper inner quadrant tumours (n=29, 47.50%). Luminal A subtype (n=24, 39.30%) was the most common cancer biology. Mean cancer size and weight were 25.5mm (range, 1.8-105mm) and 28.1g (range 4 - 223g), respectively. Lipo-harvesting was mainly from the abdomen (n=54, 88.50%) with mean harvest volume 90.2ml (range, 20-350) and mean fill volume 62.4ml (range, 12-370ml). One-third of cases had further surgery to achieve margin clearance. One patient had an operative complication (seroma) within 30 days. On follow-up (median 380 days, range 135-582 days), five patients had another episode of lipofilling. Four patients underwent biopsy of a new lesion, all of which were benign. Disease-free survival was 100%. Conclusion: Early experience with immediate AFG suggests that it is feasible and safe in the short term. Long-term follow-up will evaluate patient satisfaction, cosmesis and further oncologic outcomes.

5:03 pm
Volumetric and dimensional analysis of breast cancer in patients undergoing breast conserving surgery
Andrew Beatty
Purpose Breast conserving surgery (BCS) improves quality of life and self-perceived body image, and when paired with radiotherapy is comparable to mastectomy. Tumour to breast size ratio is a major determining factor when considering BCS. Scaffold-guided breast tissue engineering (SGTE) is a promising technique being studied to address large volume defects from breast surgery that can't be compensated for with oncoplastic techniques. As manufacturing of personalised scaffolds can take up to 12 weeks, for malignant resection, 'off the shelf' options need to be available. This study aims to determine the common dimensions and volumes of breast cancer specimens in women undergoing BCS that would allow for the prefabrication of such scaffolds. Methodology Retrospective study of all surgical specimens of women who underwent BCS at the Royal Brisbane and Women's Hospital between 01/01/2012 and 31/12/2022. 3-Dimensional measurements of the tumour and specimen were recorded allowing volumetric calculation. Resections for invasive ductal, invasive lobular and DCIS were included. Results 966 patients were included. The average volume of specimens was 57.24cm3. For specimens mediolateral was the largest axis (5.6cm) followed by superoinferior (4.1cm) and anteroposterior (3.9cm) which produced an ellipsoid shape. The density of breast parenchyma was 0.82g/cm3. Palpable WLEs produced the largest specimens compared to wire and ROLLIS. Invasive lobular specimens were largest according to histological subtype. Average tumour accounted for 5.91% of total specimen volume. Conclusion Results would suggest an ellipsoid shape for SGTE grafts and that women undergoing palpable WLE or for lobular cancers will have the largest defects to correct.

5:12 pm
The long non-coding RNA Psoriasis Susceptibility-Related RNA Gene Induced by Stress (PRINS) is a biomarker for Invasive Breast Cancer
Marthe Chehade
Purpose: Long non-coding RNAs (lncRNAs) are cellular signaling molecules whose dysregulated expression is associated with malignancy. The Cancer Genome Atlas (TCGA) data shows that the novel lncRNA Psoriasis Susceptibility-Related RNA Gene Induced by Stress (PRINS) is underexpressed in breast cancer. The purpose of this study was to validate PRINS underexpression in breast cancer clinical samples and determine its clinical correlates, thus confirming PRINS as a breast cancer biomarker and providing insights into its cellular function. Methodology: 75 patient samples (25 normal breast, 25 primary breast tumours and 25 metastatic breast cancers) were obtained from The Kolling Institute Tumour Bank. Total RNA was extracted and relative PRINS expression was determined using RT-qPCR. De-identified clinicopathological data were collected retrospectively and the clinical correlates of PRINS expression were determined using subgroup univariate analysis. Results: Breast cancer primary tumours underexpressed PRINS relative to normal breast

tissues (mean difference in log(2) PRINS expression 1.213; CI 95%, 0.389-2.038; p = 0.002). PRINS relative expression reliably discriminated between normal and malignant breast tissues (AUC, 0.851; CI 95%, 0.748-0.954; p <0.001; sensitivity, 80%; specificity, 72%). PRINS relative expression did not significantly differ between primary tumours and metastases. Subgroup univariate analysis revealed a significant association between advanced primary tumour histological grade and PRINS relative expression (F2,41 = 4.308; p = 0.021). Conclusion: PRINS is a biomarker for invasive breast cancer whose underexpression is associated with advanced histological grade.

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Otolaryngology Head & Neck Surgery - Bealey 4

4:00 pm
Factors associated with sacrifice of the facial nerve amongst patients with metastatic parotid cutaneous squamous cell carcinoma
Vivian Lin

4:09 pm
Balloon Eustachian Tuboplasty in the Paediatric Population: A Retrospective Cohort Study
Alina Rankin

4:18 pm
Hospital admissions secondary to acute sinusitis in the paediatric population – a retrospective analysis of 230 patients
Alina Rankin

4:27 pm
Complications related to percutaneous and surgical tracheostomy: a retrospective, single-centre review
Jae Hyun Jeong
Purpose: To identify and measure risk factors relating to complications in patients undergoing Percutaneous Tracheostomy (PT) and Surgical Tracheostomy (ST) and to investigate the effect of bronchoscopy guidance on the rate of complications in patients undergoing PT in an urban tertiary hospital in New Zealand. Methodology: A retrospective database search identified 280 patients admitted to the Department of Critical Care Medicine at Auckland City Hospital (26-bed tertiary intensive care unit) who underwent a tracheostomy during their admission from 2017 to 2021. Patients' baseline characteristics, the use of the bronchoscope, the type of tracheostomy and immediate and short-term complications related to the tracheostomy were identified. Results: 201 patients underwent PT and 77 underwent ST. 27 complications occurred in 24 patients, giving a per-patient complication rate of 9%. The per-patient complication rate for PT was 20/201 (10%) and for ST was 4/77 (5%) (P = 0.24). The most common complication was tracheostomy-associated bleeding. The use of a bronchoscope may have prevented 3 complications. The highest complication rates were observed in those with a BMI greater than 30 (17.1%), those in the 6th decade of life (18.8%), in Indian (27.2%) and Māori ethnicities (21.3%) and those who received a tracheostomy more than 10 days after intubation (23.1%) Conclusion: The complication rates were not statistically different for PT and ST. For the PT group, the use of a bronchoscope was not associated with a statistical difference in the complication rate.

4:36 pm
Outcomes in Second Primary Head and Neck Malignancy are Better than Expected
Samuel Roberts
Purpose: Field cancerization leads to patients with an upper aerodigestive tract squamous cell carcinoma (SCC) demonstrating high risk of developing a second primary malignancy (SPM). Given the extensive treatment many have already received, the treatment of a SPM is very challenging and traditional teaching holds that its development is a dire situation with a guarded prognosis. However; disease, risk factor and treatment patterns are changing over time and we sought to define if this remains a truism in a modern dataset. Methodology: The University of Calgary maintains a prospectively annotated database of all head and neck patients treated in Southern Alberta since 2009. Patients were divided into groups based on primary vs secondary cancer. Chi square and fishers exact tests were used to compare patient and tumour characteristics. Cox regression analysis was used to analyse recurrence free, disease free and overall survival.

Results: 3121 patients were treated for head and neck SCC since 2009. Of these, 70 patients were treated for a SPM. Groups were similar apart from a higher likelihood of being male and of receiving single modality treatment in the SPM group (p=0.039 and p=0.044 respectively). SPM had a protective effect with regard to both disease specific and recurrence free survival (RFS) at 3 and 5 year time points. When accounting for T stage, lymphovascular invasion and extravapsular spread this trend persisted but only reached statistical significance for 5 year RFS. Conclusion: Contrary to traditional teaching; outcomes in SPM are at least as good as those with a first cancer in our cohort of patients. This has clinical implications with regard to treatment decisions and cancer surveillance.

4:45 pm
Surgical management of adult subglottic and tracheal stenosis: A 10-year institutional review.
Adham Elsiwy
Purpose: To compare the patient characteristics, aetiology and surgical management of patients with subglottic, tracheal or mixed airway stenosis. Methodology: A 10-year retrospective chart review of airway stenosis patients between 2012 and 2022 at St Vincent's Hospital Melbourne was undertaken. Patients who underwent airway surgery were identified, and demographic, disease and perioperative management details were extracted. Comparisons were made between the subglottic stenosis (SGS), tracheal stenosis (TS) and mixed subglottic/tracheal stenosis (SGTS) groups. Results: There were 80 SGS procedures in 30 patients. 63% of patients were idiopathic. Diagnostic or serial endoscopy was performed in all SGS patients, with the most common intervention being balloon dilatation (38%). 33 TS patients had 84 procedures. 27% of these patients were idiopathic, and 24% each were iatrogenic and neoplastic. Most TS procedures involved endoscopy, dilatation and laser (29%), or endoscopy and dilatation (23%). There was also a trend towards more open procedures (tracheostomy and tracheoplasty). In the 19 SGTS patients, most commonly idiopathic and iatrogenic (53% and 21% of patients, respectively), 118 procedures were performed. The autoimmune disease subgroup (11% of patients) comprised 61% of procedures. Endoscopy and dilatation was most common (42%), followed by endoscopy, dilatation and steroid injection (36%). Conclusion: Idiopathic disease was the predominant aetiology in all three subgroups of stenosis, and most cases were treated with endoscopy and dilatation, with or without steroid injections or laser. SGS and mixed SGTS were more common in women. TS patients were more likely to undergo open procedures.

4:54 pm
Management of retropharyngeal infections in the paediatric population
Ishara Dhambagolla
Purpose: Paediatric retropharyngeal infections can be associated with significant morbidity including airway compromise. Treatment can include medical management with intravenous antibiotics and steroids, as well surgical management. The aim of this study was to analyse the management of retropharyngeal infections within a tertiary paediatric centre. Methodology: Retrospective analysis of consecutive patients presenting to Starship Hospital from 1/1/15-1/1/23 with retropharyngeal infections. Data was collected from online medical records. Results: 73 patients were included in this study (mean age = 4.3 years). Diagnosis was made by clinical examination and imaging. All patients had at least 1 form of imaging. 17 had lateral neck X-rays alone, 10 patients had computed tomography (CT) alone, 46 patients had both lateral neck X-rays and further imaging including CT and Magnetic Resonance Imaging (MRI) neck. 73% of patients admitted with retropharyngeal infections underwent CT imaging. 40 patients were managed medically with intravenous antibiotics and intravenous steroids. 33 patients had surgical intervention with incision and drainage of an abscess during their admission. Of those patients, 6 (18%) required intubation and ICU admission post operatively and 1 (3%) patient returned to theatre for further surgical intervention. Mean duration of hospital stay in patients who were managed medically was 3.2 days compared to 6.33 days in patients who had surgical intervention. Conclusion: Retropharyngeal infections can be managed both medically and surgically. In this study, surgical management was usually carried out after failed medical management or in clinically more advanced disease.

5:03 pm
Cochlear implant outcomes in irradiated patients: a retrospective case-control study in Aotearoa New Zealand
Calum Fisher

5:12 pm
Snapshot of the current landscape of gene therapy for connexin-26-related congenital hearing loss and the recent challenges being faced
John Ninan

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Endocrine Surgery - Bealey 5

4:00 pm
A study of time to recovery following LOS of the recurrent laryngeal nerve in thyroid surgery
Joyce Yu
Introduction: Injuries of the recurrent laryngeal nerve (RLN) during thyroidectomy, although uncommon, can lead to major morbidity. Transection and permanent RLN injury are rare, however temporary neuropraxia and loss of signal (LOS) during intraoperative neuro-monitoring (IONM) are seen more frequently. The aims of this study were to identify factors associated with type I (segmental) and II (global) LOS of the RLN during thyroid surgery and to analyse time to recovery of vocal fold function. Materials & Method: This retrospective cohort observational study included 3806 patients (2924 female, 76.8%; 882 male, 23.2%) who underwent hemi- or total thyroidectomy in a tertiary referral centre in the period Jan 2015 – March 2021. Intermittent IONM was used routinely in all thyroid procedures studied. Regression analyses were used to determine factors associated with loss of signal and subsequent time to recovery. Results: RLN LOS occurred in 167 (2.7%) of 5983 nerves at risk during surgery. The rate of Type I LOS and Type II LOS per nerve at risk was 1.4% and 1.3% respectively. Compared with an indication of malignancy, indication of toxic nodule was associated with 96% increased odds of LOS independent of age and sex (P<0.001). The time to recovery was reduced for those who had a Type II LOS (median 4 weeks) compared to those who had a Type I LOS (median 8 weeks; p=0.04). Female sex and increasing age were each independently associated with a longer duration to return of vocal fold function. Conclusion: The time to recovery of RLN function is significantly reduced for patients who experience a Type II LOS. Toxic nodules are at increased risk of LOS compared to malignant nodules, and female sex and age are each significantly associated with a longer time to recovery.

4:10 pm
Multimodal eXplainable Artificial Intelligence Systems for the Pre-Operative Diagnosis of Thyroid Nodules.
Karishma Jassal
Introduction The interpretation of thyroid ultrasonography(USG) is a challenging task for both human and AI. Pre-operative decision making is high-staked and diagnostic AI tools require meaningful information of how a decision was rendered. This study aims to develop and compare performance of multimodal eXplainable AI(XAI) systems for thyroid nodule risk stratification. Methods USG images and clinical data was collected from 227 patients undergoing thyroidectomy. Classification ground truth is exclusively gold-standard surgical histology. The AI architecture was trained to identify the relevant nodule and classify identified nodule or full USG image into benign or malignant. The XAI was subsequently concatenated with clinical data including FNAC results to produce multimodal systems. Gradient-Weighted Class Activation Map(Grad-CAM) is used to provide saliency mapping for visual interpretability of the XAI system's prediction. Results The XAI systems predicts histology as follows: Model 1 (Segmented nodule + clinical data) Accuracy 77% F-score 70% Sensitivity 61% Specificity 89% AUC 0.87 Model 2 (Full USG image + clinical data) Accuracy 84% F-score 70% Sensitivity 96% Specificity 81% AUC 0.86 Model 3 (Segmented nodule + Full USG image + clinical data) Accuracy 86% F-score 78% Sensitivity 86% Specificity 87% AUC 0.88 Grad-CAM: Maps demonstrate salient areas for a benign nodule diagnosis overlaps spongiform areas and malignant diagnosis salient areas overlap solid components of a partially cystic-solid nodule and microcalcifications within nodules. Conclusion Benchmarking histopathology as ground truth and providing visual interpretability can produce a veritable XAI tool for thyroid nodule diagnostics with risk accountability.

4:20 pm
Optimizing Shared Decision Making for Thyroid Surgery: A Mixed-Methods Approach to Alpha Testing of Decision Aid in Low-Risk Thyroid Cancer Management
Ahmad Alam
Purpose To enhance shared decision-making in the context of thyroid surgery for low-risk cancer, this study aims to assess the acceptability and usability of decision aids (DAs). This is a key step in the systematic development of a DA as per International Patient Decision Aid Standards and seeks to refine and optimize it, ultimately improving the quality of patient engagement and outcomes in the management of low-risk thyroid cancer. Methodology We employed a mixed methods approach to assess a DA for thyroid surgery consideration. Post-consultation, patients gave feedback on both paper and web-based DAs through an online survey measuring acceptability and decisional conflict. A working group refined the DAs based on feedback from at least 5-7 patients per cycle, repeating this process three times to create prototype

versions. Focus group meetings are planned that will gather diverse perspectives on the prototype, ensuring comprehensive assessment and refinement. Results Out of the 12 patients who completed the paper DA survey, 10 rated its sections as excellent or good (84%), while all 7 patients who completed the web DA survey gave it a favourable rating of excellent or good (100%).On a scale of 0 to 100, where 0 signifies no decisional conflict and 100 suggests extremely high conflict, the paper DA scored a mean (SD) of 18(15.3), and the web DA scored 14.7(11.25). These scores indicate low decisional conflict, demonstrating effective support for decision-making in both cases. Conclusion The study revealed high acceptability and low decisional conflict in both prototype paper and web-based DAs for thyroid surgery, emphasizing their potential to improve shared decision-making in low-risk thyroid cancer management.

4:30 pm
Prophylactic central lymph node dissections for small papillary thyroid cancers reduces subsequent radioactive iodine therapy – A binational cohort study
Tianrui Ren
PURPOSE: For small papillary thyroid cancers (PTCs) with no lateral nodal involvement, American Thyroid Association guidelines recommend performing prophylactic central lymph node dissection (CLND) if it influences further management. This binational study explored the extent CLND affects subsequent therapy, including completion thyroidectomy and adjuvant radioactive iodine (RAI) ablation, in patients with small PTC. METHODOLOGY: Adults with small papillary thyroid cancers (≤4cm) were recruited from 42 institutions through the Australian & New Zealand Thyroid Cancer Registry (ANZTCR), between 2017 and 2023. Patients were excluded if they had clinical nodal involvement. The rate of completion thyroidectomy, RAI ablation and surgical complications were compared between patients with and without CLND. RESULTS: Of 1,636 patients with small PTCs (78% female; mean age 51 years), prophylactic CLND was performed for 747 patients (46%). Of those treated with a hemithyroidectomy (n=747), the rate of completion thyroidectomies was similar between patients with and without CLND at the index operation (p=0.34). However, CLND was associated with a 10% lower risk of the patient being recommended RAI ablation (adjusted relative risk [aRR] 0.90; 95% CI 0.86-0.94; p<0.001). Furthermore, CLND did not result in increased recurrent laryngeal nerve injury (p=0.36), permanent hypoparathyroidism (p=0.23) or return to theatre (p=0.86). CONCLUSION: From the surgeon reported cases of low risk PTC across Australia and New Zealand, prophylactic CLND for T1, T2 papillary thyroid cancers reduced subsequent RAI therapy, even though it did not influence subsequent completion thyroidectomy. There were no additional risks of surgical complications post CLND.

4:40 pm
Thyroid cancer patients' self-reported voice changes after thyroidectomy are not predicted by intraoperative nerve monitoring.Thyroid cancer patients' self-reported voice changes after thyroidectomy are not predicted by intraoperative nerve monitoring.
Stephanie Manning
Purpose: Subjective voice change after thyroidectomy is common and affects patients' quality of life, however vocal cord palsy is rare. We aimed to analyse self-reported voice changes using Patient Reported Outcome Measures (PROMS) data from The Australia New Zealand Thyroid Cancer Registry (ANZTCR) and to identify any relationship between PROMS and the use of intraoperative nerve monitoring (NIM). Methodology: Patients from the ANZTCR with PROMS using the EORTC QLQ- THY34 survey were included for analysis. Voice scores (VS) were calculated using a calculation and transformed into a linear score between 0-100. Low numbers indicate a good voice score. Results: 860 patients from the registry had PROMS data. NIM was used in 625/787 (79.4%) of cases, and loss of signal was uncommon in 28/620 (4.5%). The vocal cord palsy rate was low - temporary 24/785 (3.1%) and permanent 1/785 (0.1%). The majority of patients had good voice scores, with 542 patients having a score between the range of 1-20. There was no difference in mean voice score whether NIM was used or not 16.23 vs 18.75 (p=0.226). Conclusion: Patient voice outcome is good after thyroid cancer surgery and vocal cord palsy rate is low. There was no association between NIM use and voice score. This is the first study of prospectively collected patient reported voice scores after thyroid cancer surgery in Australasia.

4:50 pm
Predicting Vasopressor Requirement following Surgery for Phaeochromocytoma
Hazel Serrao-Brown
Purpose: To identify predictive factors for vasopressor (VP) requirement post-adrenalectomy for phaeochromocytoma (PHAEO) Methodology: A retrospective cohort study was undertaken at a tertiary centre. Patient demographics, co-morbidity score, pre-operative symptoms, pre-operative plasma and urinary catecholamine levels, medications and surgical approach, were analysed for patients undergoing surgery for PHAEO in the period 2013-2022. The primary outcome measure was requirement for VP in the post-operative period. Multivariate analysis was performed. Results: 105 patients (female n=60, 57%)

underwent surgery for PHAEO in the period 2013-2022. The median age was 50yr and median BMI24. 91% of patients were ASA grade ≥ 3, 19% had an underlying causative genetic condition. 18% of patients presented as an adrenal incidentaloma, six patients had bilateral tumours. The median tumour size was 4.8cm, 5% were malignant. Post-operatively, 36% of patients required VP support within the first 24 hours. Elevated plasma normetanephrines were associated with a significantly increased rate of VP requirement post-operatively (OR 2.2, p<0.05). Patients undergoing open surgery had a higher incidence of VP requirement (OR 2.7, p<0.05). Symptomatic patients had a higher rate of VP use compared with those presenting as incidentaloma (p<0.05). The use of pre-operative alpha blockade, pre-operative mean arterial pressure, patient co-morbidities, underlying genetic condition and the presence of metastasis were not significant predictors of VP requirement. Conclusion: In PHAEO patients, pre-operative symptoms, elevated plasma normetanephrines and open adrenal surgery are associated with a significantly higher rate of VP requirement in the post-operative period.

5:00 pm
Association of PD-1 and PD-L1 expression with clinicopathological variables in Papillary thyroid cancer
Kul Ranjan Singh
Introduction: 10-30% of patients with Papillary thyroid cancer (PTC) recur and may become de-differentiated. Interaction between Programmed cell death protein(PD-1) and its ligand(PD-L1) has been found to have an important role in oncogenesis. This study aims to identify the association of these checkpoint inhibitors with clinicopathological variables in PTC. Methodology: 29 patients who underwent total thyroidectomy for PTC between April 2016 to March 2017 were included. PD-1 and PD-L1 immunohistochemistry were done on the surgical specimens. Results: PD-L1 expression in the tumor was seen in 62%, of which it was strongly positive in 21%. PD-1 expression was negative in all specimens. In tumor-infiltrating lymphocytes (TILs), PD-L1 hotspots were seen in 24% with 17.2% being in the range of 26-40%. 62% of the samples with a classical variant of PTC were either moderately/ strongly positive for PD-L1 expression and 30.8% had positive PD-1 TIL hotspots (p<0.05). Hobnail, cribriform morular, and tall cell variants were negative for PD-L1 expression and PD-1 hotspots in TIL (p<0.05). PD-L1 expression was seen in 60% of the cases with extrathyroidal extension (ETE) and all cases with lymphovascular invasion and perinodal extension (p<0.05). No association was found between the strength of PD-L1 expression and ETE. 80% of cases with ETE were negative for PD-1 hotspots in TILs. The percentage of PD-1 TIL hotspots did not correlate with any of these clinical parameters. Conclusion: PD-1 and PD-L1 expression are associated with aggressive PTC behavior and can serve as a prognostic marker for personalized therapeutic strategies.

5:10 pm
Day Zero Parathyroid Hormone Levels Predict Cure after Parathyroidectomy
Brodie Laurie
Purpose: To evaluate the predictive value of day zero post-operative parathyroid hormone (PTH) levels in determining long-term cure for primary hyperparathyroidism (pHPT) following parathyroidectomy. Methodology: This multicentre, retrospective diagnostic accuracy study utilised data from a single surgeon, recorded in a prospectively maintained surgical database. Patients who underwent parathyroidectomy for pHPT were included, with exclusions for secondary or tertiary causes and incomplete follow-up. Day zero post-operative PTH levels were the key predictor variable, while cure at six months, defined by normocalcaemia, was the outcome. Diagnostic parameters including sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and accuracy were calculated for an optimal PTH cut-off determined using a receiver operating characteristic (ROC) curve and Youden's index. Results: Out of 291 patients included, 278 (95.5%) were cured at 6 months. An optimal PTH cut-off of <3pmol/L was identified, correlating with a true positive rate of 81.3% and a false positive rate of 0%. Patients with day zero PTH <3 (77.7% of the cohort) were all cured at six months. The PTH <3pmol/L cut-off demonstrated a sensitivity of 81.3%, specificity of 100%, PPV of 100%, NPV of 20%, and an accuracy of 82.1%. Conclusion: Day zero post-operative PTH level <3pmol/L is a reliable predictor of cure for pHPT following parathyroidectomy. A PTH level of <3pmol/L is an effective cut-off to identify patients who will be cured, potentially reducing the need for prolonged biochemical monitoring.

5:20 pm
Tumour size predicts recurrence in tall cell subtype papillary thyroid carcinoma
Brodie Laurie
Purpose The tall cell variant of papillary thyroid cancer (TCVPTC) is the most common variant. There is debate whether its prognosis is due to adverse histological features such as lymphovascular invasion (LVI) or lymph node metastasis rather than subtype alone. Methodology From 2003-2020, 97 patients with TCVPTC (defined as a height-to-width ratio of ≥3:1) and at least 30% tall cells were compared against 390 classical papillary thyroid carcinoma (CPTC). Survival analysis was performed with multivariable modelling initially. Propensity scoring was then performed with a 2:1 case matching as subgroup analysis to account

for adverse histological features. Disease free survival was the primary outcome Results TCVPTC are more likely to present with adverse histological characteristics which predict an increased risk of recurrence, LVI (HR 2.24 p=0.02, lymph node involvement (HR 5.78 p<0.001) and multifocality (HR2.13 p=0.32). However, after propensity scoring and matching for lymphovascular invasion and lymph node involvement, there was no significant difference in risk of recurrence (OR 1.06 95%CI 0.98-1.10 p=0.14). TCVPTC tumors without adverse histological characteristics were smaller (<2cm). Conclusion TCVPTC tumours (<2cm) are not at increased risk of recurrence compared to CPTC if no other adverse clinicopathological factors are present. The presence of nodal disease and vascular invasion are independent predictors of a significantly increased risk of recurrence.

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Surgical Education - Dobson 3

4:00 pm
Procedure-Based Assessment (PBA) in Competency-Based Training: Survey of Australian General and Colorectal Surgeons
Zainab Naseem
The competency-based training (CBT) model is a unique approach to surgical training. The procedure-based assessment (PBA) in the CBT framework can pose challenges for supervisors, as this assessment method involves the use of an entrustment scale. The aim of this study was to gauge the attitudes of surgeons regarding the feasibility of PBA in CBT. Methodology A 19-question survey was conducted of GSA and CSSANZ members via a REDCap link and could be completed in 10 minutes with minimal typing. Results The response rate was 17.32% for GSA (151/866) and 17.06% for CSSANZ (50/293). 22.9% of supervisors had never completed a PBA. General surgeons were more engaged with PBAs than colorectal surgeons (47.3% vs 13.7%) and training rates (29.5% vs 36.9%). Colorectal supervisors reported lower comfort levels (37.2% vs. 65.5%), shorter completion times (10 vs. 15 minutes), and more hindrances in complex procedures (11.8% vs. 61.1%) compared to general surgeons. The effectiveness of PBA as a feedback tool was acknowledged by 79.6% of participants. Statistical analyses supported the correlation between increased PBA use and higher assessor comfort levels. Factors like administrative support, research funding, and varied training methods were recognized as potential facilitators for PBA implementation. Conclusion This study underscores the positive perceptions of PBAs but highlights variations in engagement and challenges emphasizing the need for targeted support and training.

4:12 pm
Unaccredited Specialty Surgery 'Training', the impact of the 'pre-SET' years
Caroline Dowling
Purpose Many PGY3+ doctors spend more than two years in clinical and research posts accruing 'points' before applying for selection to surgical training. This group has become vulnerable to exploitation as there is no formal oversight of their progress. This study aimed to assess the impact of these circumstances for unaccredited plastic, orthopaedic, ENT, urology, and vascular surgical registrars (USRs) in Australia. Method An online anonymous 21 item questionnaire, developed collaboratively with two USRs, was distributed via social media, and open for 6 months in 2023. Descriptive analysis of responses has been completed, with qualitative analysis of open-ended responses pending. Results 79 respondents completed the survey identifying as male (51%) and female (49%). Fifty respondents were from Victoria or NSW, with all regions except the Northern Territory represented. 32% were Urology registrars. PGY range was 3 – 13 (median 7), with 84% >PGY5. 77% had completed >2 USR years. 41% had attained a higher degree and 17% relocated interstate for employment. 50% had >1 application to surgical training with 8 >3. 70% had spent more than $5000 on RACS specific courses and examinations and 23% more than $20,000. A similar pattern was found for travel costs to present at meetings and other preparation for applications. Only 30.37% reported receiving helpful feedback as USRs. Conclusions Current RACS surgical training selection leaves USRs vulnerable to a lengthy employment period in an informal 'training' system, adverse financial impacts, and uncertainty about outcome. This "lost tribe" has no formal surgical 'training' oversight or affiliation.

4:24 pm
What factors are influential for junior doctors deciding on a surgical career?
Sarah Rennie
Purpose A surgical career should be inclusive and encourage diversity. Understanding influencers

for/against choosing surgery may inform strategies to encourage doctors to consider a surgical career. Methodology By comparing career intentions on medical graduation and at PGY5, we identified four groups: 1. consistently wanting, 2. never wanting, 3. change to, 4. change away from a surgical career. Doctors from PGY6-11 completed a zoom semi-structured interview regarding career choices. Interviews were transcribed and analysed inductively to generate themes using grounded theory. Results Forty doctors were interviewed. The reasons given by doctors never interested in surgery included perceived nonalignment of skill set and/or not wishing to work in a hospital. Those who changed away were turned off by poor work-life balance, difficulty of getting onto training, arduous training. Doctors consistently considering surgery highlighted similar influences as the turned-away group to make training and work as a surgeon more tolerable. Those changing towards were attracted to surgery's alignment with their skill set and surgery adhering to their concept of being a doctor ("Fixing problems"). Features influencing career selection for all groups were role models, speciality culture, identifying with a "tribe" and support to pursue their career. Conclusion The reasons given by doctors never interested in surgery are likely to negate any useful strategies to attract them. However, this study can inform interventions to modify career choices of those who move away from a surgical career and to encourage greater diversity such as support, work culture, role models and the nature of surgical training.

4:36 pm
Factors affecting career choice in Pacific Medical students in Aotearoa New Zealand
Melbourne Mauiliu-Wallis
Purpose: The Pacific Peoples of Aotearoa are 7% of the population and overrepresented in poor health determinants and outcomes. Only 2% of NZ doctors are Pacific and little is known about their career patterns and influencing factors. This study is the first to identify factors influencing career choices for Pacific. Methodology: This study is part of the Medical Schools Outcomes Database and Longitudinal Tracking Project (MSOD) for cohorts graduating between 2011-2020. IBM SPSS Statistics was used for descriptive and statistical analysis. Differences were examined using Pearson Chi-square and Mann-Whitney U tests with significance set at 0.05. Results: A total of 254 Pacific students were included, 142 (56%) were female and 25% had decided on a specialty by graduation: 34% Surgery, 20% GP and 13% Paediatrics. Thirty-five percent of Pacific vs 24% of non-Pacific preferred to practice in Auckland ($p<0.001$). More Pacific students rated financial prospects ($p=0.019$), prestige ($p=0.013$), cost of training/debt ($p=0.023$), cost of vocational training ($p<0.001$), influence of parents/relatives ($p<0.001$) and helping people ($p=0.005$) as important factors. Within Pacific, males rated the following higher vs females: research/teaching opportunities ($p<0.001$), prestige ($p= 0.007$), training positions ($p=0.042$), career advancement ($p=0.001$) and job security ($p= 0.007$). Conclusion: Pacific medical students at graduation wished to practice in Auckland and preferred surgery as a career. There are significant differences in factors between Pacific and non-Pacific, including costs of training, and within Pacific. Qualitative analysis of factors important to Pacific graduates in their career choices is planned.

4:48 pm
The Development of a Simulation-based Debriefing Training Programme for Healthcare Workers
Isabella MacArthur-Beadle
Purpose: Debriefing is an important component of healthcare, enabling individuals and teams to reflect on their performance, thereby improving their skills and processes. However, in many healthcare contexts including operating theatres, debriefing is not routine and staff lack adequate training in debriefing skills, which may lead to negative outcomes such as reduced morale, job dissatisfaction and preventable errors. This research details the development of a simulation-based debriefing training programme for staff in Starship Theatres. Methodology: Following stakeholder discussions with theatre personnel, a learning needs questionnaire was created as an anonymous survey and completed by allied health staff in Starship Theatres. A thematic analysis of this was performed and used to guide the development of simulation-based debriefing training, with the support of the Douglas Starship Simulation Programme. Results: Thematic analysis revealed overall interest in routine debriefing, but concern around barriers to implementation; appropriate timing and duration, buy-in from all team members and potentiating interpersonal conflict. Subsequently, the training programme was developed with a strong focus on psychological safety, flexible timing and solution-focused team discussions. The programme is delivered as an hour-long workshop; half didactic (to explain the structure and communication tools) and half as interactive simulation to practice team discussions. Conclusion: Routine debriefing has garnered interest and shows promise in improving team performance, job satisfaction and therefore patient outcomes. This simulation-based programme is currently underway as a quality improvement initiative in Starship Theatres.

5:00 pm
Developing an objective assessment of performance for lumbar microdiscectomy: Delphi methodology
Ganeshwaran Shivapathasundram

Purpose Lumbar microdiscectomy (LM) is the most common spinal procedure performed worldwide. Despite surgical training transitioning towards competency-based training, there are no objective methods of assessing competency in performing LM. The aim of this study was to reach expert consensus to create an objective evaluation tool for assessment of LM. Methodology Essential steps for LM and descriptors for “poor”, “average” and “excellent” performance at each step were developed. 16 surgeon experts were consulted and a Delphi methodology was used to obtain consensus on how suitable the steps and descriptors of performance were for including in the assessment tool. Responses were obtained until consensus was achieved for each of these descriptors. Results Twelve experts from multiple institutions participated in the study. After two rounds of evaluations a Cronbach alpha of 0.99 was achieved, indicating a very high level of consensus. Steps and descriptors of performance that >80% of experts rated as 4 were used to create the final objective evaluation tool. Conclusion Using a Delphi methodology expert consensus was achieved for the first time regarding the steps and descriptors of performance for LM. Subsequently an objective assessment tool for LM surgery was created. This tool can identify strengths and weakness in performance and allow competency based assessment.

5:12 pm
Alternate approaches to video- based feedback in robotic surgery
Kirsten Larkins

4:00 pm - 5:30 pm
SERIOUS INCIDENTS RESPONSE - A FRESH APPROACH, ACKNOWLEDGING HUMAN FACTORS

Scientific Session - Medico-Legal, Senior Surgeons Program, Trainees Association, Quality & Safety in Surgical Practice, Younger Fellows, Surgical Leaders - Conway 4

4:00 pm
State of the art management of Serious incidents
Mark O'Carroll

4:20 pm
Human factors around clinical events
Maggie Meeks

4:40 pm
Discussion

4:00 pm - 5:30 pm
STATE OF THE ART: FUNCTIONAL UPPER GI DISORDERS

Scientific Session - Upper GI Surgery, General Surgery - Conway 3

4:00 pm
Gastric alimetry and recent insights into post-surgical gastric dysfunction
Greg O'Grady

4:15 pm
Hypermobility Ehlers-Danlos syndrome
Murray Barclay

4:35 pm
Achalasia update / POEM
Gary Crosthwaite

4:55 pm
Recurrent dysphagia after achalasia treatment
Michael Talbot

5:10 pm
Discussion

4:00 pm - 5:30 pm
THE FUTURE OF BARIATRIC SURGERY

Scientific Session - Bariatric Surgery - Conway 1

4:00 pm
Robotics - accepting the inevitable?
Jason Free
Robotic Surgery has been an adjunct to various fields of surgery for many years, however more recently it has become increasingly popular in the field of bariatric surgery. There are many potential benefits in terms of improving patient outcomes and reducing surgeon fatigue, however the evidence is debatable. I present my 5 years of experience in robotic bariatric surgery and data of its ongoing expanding use.

4:20 pm
Artificial intelligence - Aid or adversary?
Simon Kos

4:40 pm
Pharmacotherapy for obesity and the future of obesity management
John Dixon

5:20 pm
Discussion

4:00 pm - 5:30 pm
WATCH AND WAIT

Scientific Session - Colorectal Surgery - Conway 5

4:00 pm
Predicting and manipulating chemoradio responsiveness
Joseph Kong

4:12 pm
How to consent for 'Watch and Wait'
Jodie Ellis-Clark

4:24 pm
TNT for early rectal cancer
Jon Barnard

4:36 pm
MSI high tumours and W&W: is this the same thing?
Tamara Vu

4:48 pm
RENO update
sina vatandoust
Rectal Cancer is a common malignancy. A standard treatment approach for patients with rectal cancer involves pre-operative treatment followed by resection. The resection can lead to surgical complications and long-term consequences. A Watch-and-Wait approach can be considered in patients who achieve a complete clinical response to pre-operative treatments. The RENO study (A longitudinal cohort study of the Watch-and-Wait in complete clinical responders after chemo-radiotherapy for localised rectal cancer),

investigates the safety of the Watch-and-Wait approach. The study also investigates biomarkers and Patient Reported Outcome Measures in this setting. An update on recruitment and available safety data from the RENO study are presented in this meeting

5:00 pm
Surveillance, salvage and survivorship after W&W
Nabila Ansari

5:12 pm
Discussion

4:00 pm - 5:30 pm
YES WE CAN, BUT SHOULD WE?

Scientific Session - Surgical Oncology, HPB Surgery - Conway 2

4:00 pm
What is the role of immunotherapy abdominal malignancies
Michelle Vaughan
Immunotherapy has revolutionized the treatment of many cancers, with some patients previously considered incurable, now living long years. BUT the benefit varies enormously depending on the cancer, indication and tumour molecular make-up. Also, immunotherapy can have lifelong and even fatal toxicities, and it's expensive. I will run through a summary of what immunotherapy entails, when it works, doesn't work, and might work, mainly in colorectal cancer (see talks earlier in the day for upper GI cancer immunotherapy), and the difficulty in weighing the risks and benefits.

4:15 pm
How do we define and avoid futile oncologic care?
Pringl Miller

4:30 pm
Circulating DNA - what's its role in solid organ cancers?
Callisia Clarke

4:45 pm
Liver transplantation: pushing the oncological boundaries
Eunice Lee

5:00 pm
Case Presentation
Jamie Crichton

5:15 pm
Questions for the panel

---

07 May 2024

5:30 pm - 6:30 pm
ANZ CHAPTER OF THE ACS NETWORKING DRINKS

Cocktail - *Cross Discipline* - Bealey Foyer

5:30 pm - 6:30 pm
ANZSCMFS ANNUAL BUSINESS MEETING

Business Meeting - Craniomaxillofacial Surgery - Dobson 2

5:30 pm - 6:30 pm
AUSTRALIAN SOCIETY OF PLASTIC SURGEONS ANNUAL GENERAL MEETING

Business Meeting - Plastic & Reconstructive Surgery - Dobson 1

5:30 pm
AGM papers
Nicola Dean, Nicola Dean

5:30 pm - 6:00 pm
BREASTSURG ANZ ANNUAL GENERAL MEETING

Business Meeting - Breast Surgery - Dobson 4

5:30 pm - 6:30 pm
COLON AND RECTAL SECTION ANNUAL BUSINESS MEETING

Business Meeting - Colorectal Surgery - Conway 5

5:30 pm - 6:30 pm
GSA ANNUAL GENERAL MEETING

Business Meeting - General Surgery - Conway 3

5:30 pm
AGM
Sarah Benson

07 May 2024

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Endocrine Surgery, Breast Surgery

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Trainees Association, Younger Fellows, Quality & Safety in Surgical Practice

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - HPB Surgery, Bariatric Surgery, Upper GI Surgery

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Senior Surgeons Program, Medico-Legal

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Trauma Surgery, Rural Surgery, General Surgery

---

08 May 2024

7:00 am - 8:20 am
CHRISTIAN MEDICAL FELLOWSHIP BREAKFAST (TICKETED EVENT)

Breakfast Session - *Cross Discipline* - Dobson 4

7:00 am - 8:20 am
INDIGENOUS HEALTH BREAKFAST (TICKETED EVENT)

Breakfast Session - Indigenous Health - Waitaki

7:00 am
Introduction
Benjamin Cribb

7:10 am
Award Presentation
Kerin Fielding

7:40 am
A tale of two meetings
Alison Scott

7:00 am - 8:20 am
MASTERCLASS (MC05): MEET YOUR JOURNAL - SCIENTIFIC PUBLISHING IN ANZ JOURNAL OF SURGERY (TICKETED EVENT)

Masterclass - *Cross Discipline* - Conway 1

This masterclass aims to help you: - Understanding the history, international standing, strategy and relationship with RACS - Provide insight of the editorial process - How to avoid disappointment following

submission of your original research paper - Opportunities for involvement (reviewer...editor) - “anatomy of the article” May be a 10 minute cover of a specific topic like how to write and abstract, which next year can be introduction, later methods ...or dedicate in 2025 an entire session on paper writing. - Provide opportunities to the participants for feedback, questions and how they would like to see the ANZ Journal of Surgery.

7:00 am
Introduction
Zsolt Balogh

7:05 am
ANZ Journal of Surgery - History, Ranking, Strategy and Relationships
Julian Smith

7:20 am
Editorial process
Ian Civil

7:30 am
How to avoid disappointment following submission of your original research paper
Sarah Aitken

7:40 am
How to contribute to the journal (author, reviewer, editor)?
Andrew Hill

7:50 am
Questions and discussions including a general surgery and colorectal surgery perspective
Deborah Wright, Zsolt Balogh, Meron Pitcher

8:10 am
Suggestions for future masterclass topics and format

8:15 am
Summary and closiing remarks
Julian Smith

7:00 am - 8:20 am
MASTERCLASS (MC06): BREAST IMPLANT RECONSTRUCTION FOLLOWING MASTECTOMY (TICKETED EVENT)

Masterclass - Breast Surgery, Plastic & Reconstructive Surgery - Bealey 3

7:00 am
Prepectoral vs. subpectoral implant reconstruction - how I do it
Sanjay Warrier

7:20 am
Mesh vs. no mesh in implant-based reconstruction
Ashu Gandhi

7:40 am
Implant reconstruction in large breasted patients
Farhad Azimi

8:00 am
Avoiding poor results in implant reconstruction
Peter Chin

7:00 am - 8:20 am
MASTERCLASS (MC07): EXENTERATION (TICKETED EVENT)

Masterclass - Colorectal Surgery - Bealey 2

7:00 am
Presentation
Peter Sagar

7:10 am
Proforma for MRI reporting in exenteration
Verity Wood

7:20 am
Extended lateral resection / PE for LARC
Peter Lee

7:30 am
Panel Discussion
Verity Wood, Satish Warrier, Peter Lee, Tamara Glyn, Craig Harris, Peter Sagar, Frank Frizelle

7:00 am - 8:20 am
MASTERCLASS (MC08): RHINOPLASTY (TICKETED EVENT)

Masterclass - Craniomaxillofacial Surgery, Otolaryngology Head & Neck Surgery, Plastic & Reconstructive Surgery - Conway 2

7:00 am
The 13 key principles of rhinoplasty from the consult to the recovery
Jeffrey Marcus

7:25 am
thoughts and reflections on 25yrs of rhinoplasty surgery
Chris Thomsons

7:00 am - 8:20 am
MASTERCLASS (MC09): ARTIFICAL INTELLIGENCE IN HPB SURGERY (TICKETED EVENT)

Masterclass - HPB Surgery - Conway 3

7:00 am
Introduction
Isaac Tranter-Entwistle

7:05 am
Prediction / wearables in pre-, intra- and posteroperative applications
Chris Varghese

7:15 am
Opportunities and barrier for AI implementation in surgery
Henry Badgery

7:25 am
Technical aspects of software engineering - what is needed from clinicians
James Atlas, James Atlas

7:35 am
Governance, ethics and the current NZ picture
Kevin Ross

7:45 am
Discussion

7:00 am - 8:20 am
MASTERCLASS (MC10): A HOLISTIC APPROACH TO RENAL REPLACEMENT THERAPY (TICKETED EVENT)

Masterclass - Vascular Surgery - Bealey 4

7:00 am
Dialysis PD/HD Nephrology
Penny Hill

7:12 am
Dialysis Access systems
Jan Swinnen
Renal Replacement Therapy (RRT) is an extraordinarily expensive & complicated process – keeping people in ESRF alive & healthy over the long term (years to decades). Dialysis access – Fistulas, Vascaths & PD catheters – are an integral to RRT & responsible for a large part of its costs & hospitalisations. Hence, to achieve optimal patient outcomes cost effectively in planning, creating & maintaining Dialysis Access, sophisticated, well run Dialysis Access Systems are needed. Dialysis Access for a patient in ESRF needs to be individualised to the patient & integrated in sequence & in time. The key components of an effective Dialysis Access System are: 1. A system that bridges care in time (life-long RRT) & in space (at home, at work, in clinic, in hospital) 2. A team 3. Resources to deliver the care: Imaging, Endovascular & Open Surgery, Dialysis Units, Clinics, “Dialysis” Ward & Home Support. Dialysis Access Team: There are many different systems & contexts. However, integral to all are the following players: 1. A Nephrologist with an interest in RRT!!! (Team Leader) 2. An Access Surgeon with an interest in RRT & the following skills: Ultrasound, Open Surgery, Endovascular Surgery, PD skills & Understanding of HD/PD. 3. A Dialysis Access Co-Ordinator. The Critical Position in the Integrated Dialysis Access Team. Responsible for facilitating the individual patients journey thru the RRT system, including PD catheter placement, training & troubleshooting, Fistula planning, creation, Home HD training & troubleshooting. All this in close liaison with the Transplant Team & the Medical Therapy Team. 4. Specialised Dialysis Access Nurses, with skills in PD & HD management. Both at Hospital, Dialysis Unit & Home Care levels.

7:24 am
Central Venous catheters for dialysis: Friend or Foe
Jan Swinnen
Central Venous Catheters (CVC) for Dialysis an established but grossly over & misused modality in ESRF. CVC morbidity: 1. Destruction of Central Veins: (DVT, Central Vein Occlusion, Arm swelling, SVC Syndrome, AVF malfunction or failure). 2. Line Sepsis & sequelae 3. CVC Malfunction: Fibrin Sheath, occlusion, displacement, fracture 4. CVC Revision: Arterial injury, pneumothorax Avoiding CVC problems: a. DON’T Use CVCs! Pre-emptive Dialysis Systems, Urgent Start Seldinger PD (USSPD), forced AVF maturation. b. Appropriate CVC use: NO L sided CVCs!!; DO use temporary femoral lines, R SCV & tunnelled lines. c. Correct placement (US & Xray guidance), correct care, correct troubleshoot CVC appropriate when: 1. Life expectancy < 1 year 2. Life expectancy, 1 - 2 years & difficult Access 3. Emergency dialysis 4. Where AVF is contra-indicated: Arterial Steal, poor cardiac reserve, fragile skin & PD not an option. Inappropriate CVC use: 1. ~all L Sided CVCs!! 2. When PD / USSPD is an alternative 3. When Dialysis Access can be provided / restored by urgent Endovascular fistuloplasty or maturation. Why no L sided CVCs : Because of the non-linear anatomy of L sided CVCs, they: 1. Rapidly (days) & reliably destroy L sided Central Veins 2. Morbidity of L upper limb edema, 3. SVC syndrome when R side also damaged, 4. Make L upper limb unsuitable for AVF creation / use How to keep CVCs on the R hand side when: 1. R Jugular stenosis / occlusion: Cross the lesion endovascularly OR enter the SVC via the anterior or external Jugular OR use the R SCV. 2. R Jugular CVC sepsis: Remove CVC, Antibiotics, bridging dialysis thru Femoral line, re-insert R CVC. 3. R Jugular thrombosis: Anticoagulate, cross thrombus & place a R CVC.

7:36 am
PD or HD Acritical decision
Penny Hill

7:48 am
Principles in the diagnosis and Management of Fistula problems
Jan Swinnen
A Dialysis Access Fistula is a pathology, created surgically for therapeutic reasons. “Malfunction” or “abnormality” of the fistula is therefore a pathology of a pathology. This makes definitions, diagnosis and management of fistula problems complicated. The fistula is created to provide reliable & safe access for dialysis without causing the patient any harm. The points of interest therefore in fistula troubleshooting are: 1. The adequacy & safety of dialysis access; 2. The adequacy of dialysis; 3. The health of the host limb; 4. The effect of the fistula flow on Cardiac Status. In the assessment & management of a fistula, all four need to be addressed. 1. Can the fistula be reliably accessed, with adequate needle spacing? Will adequate hemostasis & healing occur on decannulation? 2. Does the fistula flow (Qa) and outflow (VRP) allow for adequate dialysis? 3. Is there a clinical steal problem? Venous outflow problem compromising the limb? Is the fistula itself a problem – ulceration, aneurysm formation, giant fistula, sepsis? 4. Is the fistula a burden on the heart, in absolute or relative terms? The above questions are answered by: a.) Taking a history of the patient’s dialysis, dialysis access & fistula, b.) Reviewing “Dialysis Numbers” (Qb, Arterial & Venous Pressures), both recent, past & “trends”, c.) Examining the fistula & the host limb, d.) Performing a duplex ultrasound of the fistula circuit using a high frequency probe. Bringing all this information together allows the clinician to determine: - Is there a problem with this fistula? - What is the nature of the problem? - How severe is it? - How urgent is it? - How should it be managed – medical, surgical, endovascular?

---

08 May 2024

7:30 am - 8:10 am
GSA BOARD OF DIRECTORS MEETING

Business Meeting - General Surgery - Bealey 1

---

08 May 2024

8:30 am - 10:00 am
AORTOPATHY, INFECTION AND CONNECTIVE DISEASE DISEASES

Scientific Session - Cardiothoracic Surgery, Vascular Surgery - Bealey 4

Management of Various Acute Aortic Pathology

8:30 am
Management strategies for infected aortic grafts
Rachel Bell

8:45 am
Advances in arch aortopathy endovascular treatment (IBE)
Ross Milner

9:00 am
Management of ascending aortic graft infection
Sean Galvin

9:15 am

Complex aortic repair in HIV patients
Pradeep Mistry

9:30 am
Genetics and congential aortopathy management
Ross Milner

9:45 am
Bringing it all together - National configuration of services to complex aortic disease
Rachel Bell

8:30 am - 10:00 am
BENIGN COLON

Scientific Session - General Surgery, Colorectal Surgery - Auditorium 4

8:30 am
Endometriosis: an integrated cross-disciplinary approach
Keryn Harlow

8:42 am
Endometriosis: what to look for on radiology
Rachael McEwing

8:54 am
Paediatric colorectal – common conditions and their transition to adult services
Kiki Maoate

9:06 am
Constipation and ODS: what do we have to offer patients?
Susan Shedda
Obstructed defecation syndrome (ODS) is a complex and multifactorial problem which significantly impairs quality of life of patients. The treatment journey begins with the challenge of establishing an accurate relationship between symptoms and pathophysiology, which is critical for effective management. This talk will delve into the intricacies of diagnosing ODS though anorectal manometry and defaecating proctograms which aid in unravelling the structural and functional abnormalities contributing to the disorder. The importance of a multidisciplinary approach is highlighted. The therapeutic options ranging from conservative management with dietary modifications and biofeedback therapy to advanced surgical interventions are discussed. There is a necessity for individualised treatment plans, tailored to address the specific needs and circumstances of each patient.

9:18 am
What physiotherapy has to offer pelvic floor patients
Grace Coombs

9:30 am
Update on nerve stimulation in colorectal management
James Keck

9:42 am
Discussion

8:30 am - 10:00 am
CLEFT RHINOPLASTY

Scientific Session - Craniomaxillofacial Surgery, Plastic & Reconstructive Surgery - Bealey 2

8:30 am
Rhinoplasty pearls
Glenn Bartlett

8:55 am
Cleft rhinoplasty
Jeffrey Marcus

9:20 am
Cleft rhinoplasty
Christopher Forrest

9:45 am
Discussion

8:30 am - 10:00 am
COLLECTIONS

Scientific Session - Surgical History - Bealey 5

8:30 am
Historical Instrument and Anatomical Collections- still valuable for learning? Navigating the 'controversy' in the teaching of surgery since the 19th Century
Shelley McKellar
This presentation examines the historical and teaching value of medical history manuscripts, rare books, instruments, and anatomical collections in university settings. The extent to which surgical knowledge, specifically tacit learning (or the learning of 'how-to' skills), transpires through dissection classes, the handling of historical surgical instruments, and the close study of anatomical collections may be losing relevance. Today, an increasing number of individuals suggest that new teaching methods and the ethical concerns surrounding human remains make these collections obsolete. The ambiguities and complexities of legacy collections—or the 'controversy'—will be discussed.

9:00 am
The Monro collection - How it got to Dunedin
Terence Doyle
The Monro Collection in University of Otago Library, comprises some 450 volumes owned by one or other of the three successive Alexander Monro Professors of Anatomy in Edinburgh; father, son and grandson. This presentation will discuss the content and history of this important collection of medical works.

9:15 am
The Evolution of Services in Auckland- and lack of real planning.....
Andrew Connolly

9:30 am
WD Trotter Anatomy Museum - A ramble through time.
Chris Smith
The collection housed in the W.D. Trotter Anatomy Museum is the founding teaching and research resource of the Otago Medical School. Celebrating 150 years in 2025, how has this collection developed over the years and how is it still integrated in teaching and research in the 21st century?

9:45 am
Cotter Museum facilitating our history 'Surgery at Christchurch Hospital'
Rob Robertson

8:30 am - 10:00 am
GENETICS AND HIGH-RISK BREAST CANCER

Scientific Session - Breast Surgery - Dobson 1

8:30 am
Introduction

8:35 am
Breast Cancer Family history Unit in Manchester
Ashu Gandhi

9:00 am
Protocols for surveillance in high-risk patients and role for risk-reducing mastectomy
Ben Green

9:20 am
Safety of menopausal hormone therapy (MHT) in high-risk patients after BSO and risk-reducing mastectomy
Simone Petrich

9:35 am
Genetics update for the breast surgeon
Linda Cheng

8:30 am - 10:00 am
INNOVATION IN INDIGENOUS HEALTH: SHARING OUR STORIES

Scientific Session - Surgical Education, Indigenous Health - Dobson 3

8:30 am
Mātauranga Māori in Primary Care: Turuki Healthcare Experience
Lily Fraser

8:45 am
Te Rau Poka - a Māori surgical academy
Jonathan Koea

9:00 am
Te Poka Pū - a Māori surgical interest group
Selwyn Te Paa

9:15 am
The power of yarning - qualitative research with a native approach
Justin Cain

9:30 am
Discussion

8:30 am - 10:00 am
MOST INFLUENTIAL BARIATRIC SURGERY/OBESITY PAPERS

Scientific Session - Bariatric Surgery - Conway 1

8:30 am
Real World results with almost 2000 OAGB procedures as primary and revisional bariatric procedure – the new gold standard?
Karl Peter Rheinwalt
The application of OAGB since 13 years as a primary and revisional bariatric procedure in a tertiary bariatric center in a public hospital in Germany revealed an experience of almost 2000 cases with this procedure.

During this time period, indications for OAGB and technical details like the length of biliopancreatic limb changed according to growing experience of the team and analysis of the follow-up results. According to its feasibility even in high-BMI patients, the BMI at baseline was high with 50.8 kg/m² (30,4 to 78.2). The 30d-mortality was 0.0%. If including the postoperative period >30days, there was one letal outcome (corrsponding to 0.05%). In total, re-laparoscopy and/or endoscopic procedures for leaks from gastrojejunostomy and vertical staple line were necessary in 0.35%. Baseline data, the changes of applied technical details and lengths of the biliopancreatic limb during the study-period, and other rare postoperative complications became analyzed. More than 20 national and international workshops concerning this method took place in our center. We published our analyzed results in several publications, also in comparison with other bariatric standard operations. Furthermore we studied late postoperative problems like gastroesophageal reflux, Dumping, internal hernia, and nutritional deficiencies and give our therapeutic strategies. In conclusion we are able to present mainly positive conclusions on OAGB.

9:00 am
Association of metabolic-bariatric surgery with long term survival in adults with and without diabetes: A one stage meta-analysis of matched cohort and prospective controlled studies with 174 772 partici-pants. Syn, N et al. Lancet 2021;397:1830-41
John Dixon

9:10 am
Laparoscopic One-Anastomosis Gastric Bypass: Technique, results and long term follow-up in 1200 patients. Carbajo M et al. Obesity Surg 2017 27:1153-1167
David Martin

9:20 am
Long-term outcomes of medical management vs bariatric surgery in type 2 Diabetes. Courcoulas A et al. JAMA 2024;331(8):654-664
Angela Bayly

9:30 am
Efficacy and safety of one anastomosis gastric bypass versus Roux en Y gastric bypass at 5 years (YOMEGA): a prospective, open-label, non-inferiority, randomized extension study. Maud R et al. Lancet Diabetes Endocrinology. 2024 March 4:S2213-8587
Karl Peter Rheinwalt

9:40 am
Discussion

8:30 am - 10:00 am
MULTIDISCIPLINARY SARCOMA MANAGEMENT

Scientific Session - Surgical Oncology, Plastic & Reconstructive Surgery, Orthopaedic Surgery - Conway 5

8:30 am
Reconstruction of extremity STS: delayed vs. immediate
Andrew Hart
This is an educational overview of limb reconstruction in the management of sarcoma, highlighting the therapeutic options, principles of surgery, and process of care involved in optimising the reconstructive surgeon's role within the multidisciplinary process of sarcoma care. It reflects 15 years experience in the field, experience in thin perforator flaps, functional muscle flaps, a change from adjuvant to neoadjuvant therapy as standard, and input from colleagues (for example in quadricep reanimation research). Salient cases will be shown to highlight messages, and there will be a focus on functional reconstruction, and a reflection of the role of prosthetics.

8:45 am
Avoiding and managing of the "whoops" resection
Carla Pajak

9:05 am

The New Zealand northernregion MDM
Andrew Johnston

9:25 am
Engagement of subspecialties in sarcoma care
Lesly Dossett

9:45 am
Management of dermal sarcomas for the generalist
Lesly Dossett

8:30 am - 10:00 am
REFLUX IN CHILDREN AND ADULTS

Scientific Session - Upper GI Surgery, Paediatric Surgery - Conway 2

8:30 am
Paediatric GERD: Clearing the Fog
Sherif Emil

8:50 am
Indication / work-up for anti-reflux surgery in adults
Murray Barclay

9:05 am
Fundoplication in children - how to do it / tips and tricks
Kelvin Choo

9:15 am
How I do it - anti-reflux surgery in adults
Patrick McQuillan

9:30 am
Discussion

8:30 am - 10:00 am
RESEARCH PAPERS

Scientific Session - HPB Surgery - Conway 3

8:30 am
The efficacy and safety of acetaminophen use following liver resection: a systematic review
Victoria Murphy
Purpose: Acetaminophen is commonly used for post-operative analgesia following liver resection. It is metabolised by the liver and appropriate administration and dosage is in question in in patients undergoing hepatectomy. A systematic review was conducted to investigate safety and efficacy of acetaminophen use. Methodology: MEDLINE, EMBASE, PubMed, Web of Science, and Google Scholar were searched for instances of toxicity, liver dysfunction, and analgesic efficacy in patients undergoing hepatectomy. Results: Two randomised controlled trials and four prospective observational studies were included. The studies were of moderate quality. Four studies investigated post-operative levels of acetaminophen and its urinary metabolites, finding no evidence of toxicity. One study noted that glutathione levels decreased but not to clinically deficient levels. Administration of acetaminophen plus morphine versus morphine alone did not increase adverse events and a morphine sparing effect of acetaminophen was demonstrated in two studies. Conclusion: Use of acetaminophen for adult patients undergoing liver resection surgery as postoperative analgesia at a standard dosage is safe for baseline analgesia. All studies analysed support that toxicity is not reached; and that acetaminophen provides a morphine sparing effect without adverse effects. Acetaminophen dose reduction should be considered in

patients where extra risk factors for hepatotoxicity are present.

8:39 am
FAP expression transforms early in the tumorigenesis of pancreatic ductal adenocarcinoma; and this is detectable on FAPI-PET/CT.
william McGahan
Introduction: Fibroblast activating protein (FAP) can be targeted on PET scan (FAPI-PET/CT) to detect small foci of pancreatic ductal adenocarcinoma (PDAC). Despite potential use in early diagnosis, little is known about FAP expression in the early stages of PDAC tumorigenesis. Methods: We performed immunohistochemistry against FAP on tumour microarrays of human intraductal papillary mucinous neoplasm with low-grade dysplasia (LGD; n=13), high-grade dysplasia (HGD; n=11), stage I PDAC (n=25), stage II-IV PDAC (n=50) and chronic pancreatitis (CP; n=48). We measured stromal and epithelial FAP expression, and compared this between benign (LGD, CP) and malignant pathology (HGD, Stage I, Stage II-IV PDAC). We also recruited patients with pancreatic cystic neoplasm (PCN; n=5) to undergo FAPI-PET/CT and monitored progress for 18 months. Results: All groups of malignant neoplasia had higher total FAP expression than LGD and CP (median: LGD=4; CP=4; HGD=8, Stage I=7; Stage II-IV=7; P<0.05 for all bivariate comparisons). Each malignant group had higher odds of positive FAP expression than LGD (OR[95% CI]: HGD=7.2[1.23-62.0]; Stage I=18.4 [3.44-151]; Stage II-IV=14.4[3.57-67.6]) and CP (HGD=2.34[0.51-16.9]; Stage I=5.98 [1.45-40.9]; Stage II-IV=4.68[1.57-16.0]). Expression was primarily epithelial if present in LGD, stromal in CP, and on both cell types in malignant neoplasia. Focal avidity on FAPI-PET/CT was observed in 3 cases of PCN, and these were the same 3 to later show malignant features. Conclusion: The transition to malignant dysplasia in the pancreas is marked by changes in FAP, both in the amount of expression and cell type involved. This can be detected on FAPI-PET/CT and may facilitate diagnosis of PDAC at a curable stage.

8:48 am
Change in body composition between interval assessments of future liver remnant after portal vein and/or hepatic vein embolisation, and the impact of sarcopenia on liver resection outcomes
Howard Tang
Purpose Portal vein embolisation (PVE) and hepatic vein embolisation (HVE) are techniques that induce future liver remnant (FLR) growth before hepatectomy in patients with insufficient FLR. Sarcopenia is prevalent in cancer, and can reduce FLR growth leading to poor hepatectomy outcomes. However, body composition changes during operative workup remains unknown. We aim to identify how body composition changes between FLR assessments pre- and post-embolisation. Secondary aims will compare post-operative outcomes of sarcopenic versus non-sarcopenic groups and the effect of sarcopenia on FLR growth. Methodology A retrospective cohort study was conducted using a prospective hepato-pancreato-biliary (HPB) database at Western Health (2017 Jan-2023 Sep). 3D-Lumbar body composition (Skeletal Muscle Index, Visceral Fat Index, Subcutaneous Fat Index) were obtained using an inhouse validated automated artificial intelligence segmentation software on pre- and post-embolisation CT images. Results Of the 401 liver malignancies discussed in the HPB multidisciplinary meetings, 28 patients (22 male, 6 female; Median age 64 years; 11 colorectal liver metastases, 11 cholangiocarcinomas, and 6 hepatocellular carcinomas) underwent PVE and/or HVE. 20 patients proceeded to resection. Changes in body composition post-PVE/HVE will be presented. Post-operative outcomes will be compared between sarcopenic and non-sarcopenic groups, as well as growth rates of FLR. Conclusion Sarcopenia is associated with poor surgical outcomes. Our study investigates the change of body composition pre- and post-PVE/HVE and its association with post-operative outcomes. Future studies investigating prehabilitation strategies to preserve muscle mass should be considered.

8:57 am
What is the Influence of Gastroduodenal Artery Control Techniques on Post-Pancreatectomy Haemorrhage?
Alexander Armanios
Purpose: Post-pancreatectomy haemorrhage (PPH) is a complication of pancreaticoduodenectomy (PD), with a 20% mortality rate. PPH often arises from the gastroduodenal artery (GDA) due to its predisposition to enzymatic degradation from a post-operative pancreatic fistula (POPF). This study investigated GDA control techniques and PPH risk. Methodology: A retrospective cohort study was conducted on all PD patients from January 2022 to December 2023. Patient's clinicopathological and technical data and outcomes were analysed using SPSS v.29. Results: Eighty-two patients underwent PD, of which 79% were classic. Males comprised 62%, with a median age of 68 (IQR14) and a median BMI of 25.3 (IQR6.8). The modified Blumgart technique was used for all pancreaticojejunostomies. GDA control was achieved via the application of any combination of Hem-o-lok® (57%), staples (40%), ties (36%), sutures (33%), and LIGACLIP® (15%). PPH rate was (12.2%), with a 20% mortality rate. PPH risk was significantly associated with POPF (p<.01). The PPH risk was higher in stapled GDAs; however, this was not statistically significant (17.2% vs 4.7%,

p=0.110). The GDA was staple-controlled alone in 25% of cases, with an associated POPF rate of 24.1%. The PPH rate of stapled GDAs in the setting of a POPF was 42.9% (p=.07). However, no significant associations were reported for procedure type, surgeon, haemostatic agents, or other GDA control methods. Conclusion: This study identified an associated increased risk of PPH with stapled GDAs, especially in the setting of a POPF. While this trend did not reach statistical significance, this is a clinically important observation that requires further evaluation with an RCT.

9:06 am
Evolution of the surgical management of hepatocellular carcinoma over two decades: the Westmead experience
Asanka Wijetunga
Purpose: Outcomes in hepatocellular cancer (HCC) have improved in Australia over the last 30 years, with 5-year survival rates climbing from 6.8% in 1993 to 22% in 2018, owing to developments in medical and surgical management. However, in this period, incidence of HCC has also climbed from 3 to over 8 in 100,000, underscoring the importance of improving treatment efficiency and effectiveness. To this end, we aim to compare perioperative outcomes of HCC surgery before and after 2014 when a minimally-invasive approach became established at our institution. Methods: We present a single-center retrospective cohort study of patients undergoing HCC resection. Pre-operative, operative and post-operative data were collected through medical record review. Results: We studied 155 consecutive HCC resections: 62 from 2005-2013 and 93 from 2014-2023. Since 2014, our patients have been older (63 vs 59 years, p=0.047), more comorbid, and carried a higher anaesthetic risk (56% vs 13% ASA 3-5, p<0.001). Laparoscopic resection has been performed more frequently since 2014 (47% vs 19%, p<0.001), whilst rates of conversion to laparotomy remained unchanged at 13% (p=1.000). Despite more liver-sparing surgery, rates of major postoperative complication (Clavien-Dindo 3b-5) remained stable (8.6% vs 10%, p=0.876). Since 2014, median postoperative hospitalisation has been shorter (10 vs 8 days, p=0.016), with laparoscopic surgery being an independent predictor of faster discharge (B=-3.7, p<0.001). Conclusions: Since 2014, despite increasing patient and surgical complexity, outcomes have remained stable or improved, likely attributable to a combination of more laparoscopic surgery and evidence-based, protocolised post-operative care.

9:15 am
Influence of Vitamin D and Calcium Supplementation on Quality of Life (QoL) in Patients Undergoing Palliative Chemotherapy for Advanced Gallbladder Cancer: A Study in the Indo-Gangetic Belt
Abhinav Arun Sonkar
Background: Vitamin D, in various forms, is recognized for its significance across multiple stages of carcinogenesis. It exhibits anti-oxidative stress, anti-invasion, anti-angiogenesis, and anti-proliferative effects. Vitamin D deficiency is common in cancer patients and is associated with disease progression. Palliative cancer patients often experience vitamin D deficiency, linked to an elevated risk of pain, infections, and depression, impacting their Quality of Life (QoL). Materials and Methods: A cross-sectional study was conducted, involving n=48 cases of advanced gallbladder cancer undergoing palliative chemotherapy (gemcitabine and cisplatin) in the Department of Surgery, King George Medical University India. All enrolled patients received oral supplementation of 60,000 IU of vitamin D and 1000 mg of calcium. Quality of life was assessed using the FACT-G questionnaire before initiating chemotherapy and after completing 6 cycles. Results: The observed median survival was 35.7 weeks (approximately 9 months). Post-chemotherapy, there were no significant changes in serum vitamin D and calcium levels or functional aspects. However, there were significant improvements in physical, social and emotional dimensions. The overall quality-of-life score exhibited significant changes with a p-value of 0.021. Conclusion: The study indicates that vitamin D and calcium supplementation do not significantly alter serum values in patients undergoing palliative chemotherapy for advanced gallbladder carcinoma. However, in the context of Quality of Life, supplementation with Vitamin D and Calcium has notable positive effects on physical, emotional, and social aspects, as well as total quality of life scores.

9:24 am
Standardising process in acute biliary disease
Isaac Tranter-Entwistle
Introduction The peri-operative management of biliary disease (BD) is variable across institutions with sub-optimal outcomes for patients and health systems. This results in inefficient utilisation of limited resources. The aim of the current study was to identify modifiable factors impacting patients time to theatre, intraoperative time and time to discharge as the constituents of length of stay to guide creation of a peri-operative management protocol to address this variability. Methods Data were prospectively captured at Christchurch Hospital for all adult patients presenting for cholecystectomy between May 2015 and May 2022. Pre, post and intra-operative factors were assessed for their impact on time to theatre, operative time, and post-operative hours to discharge. Results 4577 patients underwent cholecystectomy during the study

period, of which 2807 (61%) were acute presentations and made up the cohort for analysis. Time to theatre was significantly impacted by pre-operative imaging type, while operative grade and the procedure type had the most clinically significant impact on operative time. Post operatively time to discharge was significantly impacted by drain placement. Conclusions Standardising management of biliary disease would likely result in significant savings for the health care system and improved outcomes for patients. The data seen here evidence the importance of appropriate imaging selection, intra-operative difficulty operative grade identification and low suction drain selection. These data have been incorporated in a perioperative management protocol as standardisation of care across the patient workflow in biliary disease is a sensible approach to ensuring optimal use of scarce resources.

9:33 am
Preliminary results of U- shaped dissection for achieving critical view of safety during laparoscopic cholecystectomy: our case series experience.
Ajay Kumar Pal

9:42 am
Comparing outcomes of ERCP-treated cholangitis in patients from metropolitan and rural backgrounds
Samantha Phillips
Purpose 1. To validate the Tokyo 2018 guidelines for management of acute cholangitis 2. To compare outcomes of Endoscopic Retrograde Cholangiopancreatography (ERCP) treated cholangitis between patients from metropolitan and rural backgrounds. Methodology This study retrospectively reviewed patient with cholangitis treated with ERCP at St. Vincent's Hospital Melbourne or Box Hill Hospitals from January 2016 to December 2020. There were 566 patients included in this study. Data from medical records were analysed to compare outcomes between metropolitan and rural backgrounds. Results Patients >18 years who underwent ERCP for cholangitis from any cause were included. The 30-day mortality was 6.1%, 3% and 4.2% respectively. The 90-day mortality was 2.9%, 6% and 0.8% respectively. The metropolitan patients had the longest median time to ERCP and highest 30-day mortality. The 30-day mortality for patients who underwent ERCP within 24 hours was 3.5% for Tokyo Grade I, 2.6% for Grade II and 10.6% for Grade III. This was compared with patients who underwent ERCP after 24 hours, which showed 30-day mortality was 0% for Grade I, 3.8% for Grade II and 10.8% for Grade III. Conclusion Patients from rural backgrounds often have less access to ERCP and require transfer to a metropolitan centre. This study demonstrates no major difference in outcomes between patients from metropolitan backgrounds and those from rural backgrounds undergoing ERCP at a tertiary centre. The timing of ERCP did not appear to affect outcomes, however the Tokyo Grade did impact on outcomes. This emphasises the importance of these guidelines.

8:30 am - 10:00 am
SUSTAINABILITY AND WASTE IN SURGERY

Scientific Session - Trainees Association, Younger Fellows, Quality & Safety in Surgical Practice, Senior Surgeons Program, Surgical Leaders, Medico-Legal - Conway 4

8:30 am
Setting the scene
Roderick Carr

8:45 am
Carbon footprint relevance in health, formal assessment process and opportunities to reduce footprint
Belinda Mathers

9:00 am
Forte Health first net carbon zero hospital
Stephen Mark

9:15 am
Tips and tricks - treading lightly: reducing carbon footprint at work
Ben Dunne

9:30 am
Perioperative sustainability - trying to go green

Julia Singhal

9:45 am
Discussion

8:30 am - 10:00 am
THYROID CANCER

Scientific Session - Endocrine Surgery, Otolaryngology Head & Neck Surgery - Dobson 2

8:30 am
The John Mitchell Crouch Lecture: Anaplastic - update on genomics and targeted therapies
Anthony Glover

9:00 am
Thyroid nodule biomarkers and impact on decision making
Tracy Wang

9:20 am
Individualizing the Active Surveillance Protocol for Patients with Low Grade Thyroid Cancer
Shamir Chandarana
This talk will: 1) provide an overview of the current literature on active surveillance for low-risk papillary thyroid cancer 2) outline appropriate selection criteria for patients suitable for active surveillance 3) review appropriate program requirements to facilitate active surveillance 4) discuss standardized monitoring strategies required for active surveillance.

9:40 am
QoL after thyroid cancer
Christine O'Neill

---

08 May 2024

10:30 am - 12:00 pm
PLENARY SESSION: ADVOCACY

Plenary Session - *Cross Discipline* - Auditorium 4

10:30 am
Social Responsibility
Suzanne Pitama

10:55 am
Political Responsibility
Andrew Connolly

11:20 am
Humanitarian Responsibility
Angus James Watson

---

08 May 2024

12:00 pm - 12:30 pm

THE PRESIDENT'S LECTURE - DR RODERICK CARR (CHRISTCHURCH, AOTEAROA NEW ZEALAND)

Keynote Lecture - *Cross Discipline* - Auditorium 4

12:00 pm
Denial, delay and delusion. Homo Hubris and climate action
Roderick Carr

---

08 May 2024

12:30 pm - 1:30 pm
ANZ CHAPTER OF THE ACS ANNUAL BUSINESS MEETING AND LUNCH

Business Meeting - *Cross Discipline* - Waitaki

12:30 pm - 1:30 pm
OPERATION SMILE AUSTRALIA 25 YEARS

Business Meeting - Craniomaxillofacial Surgery - Bealey 1

12:30 pm - 1:30 pm
TRAUMA CARE VERIFICATION COMMITTEE MEETING

Business Meeting - Trauma Surgery - Bealey 3

---

08 May 2024

12:45 pm - 1:15 pm
JOHNSON & JOHNSON MEDTECH LUNCHTIME SESSION: ENVIRONMENTAL SUSTAINABILITY - GLOBAL INITIATIVES IMPLEMENTED LOCALLY

Scientific Session - *Cross Discipline* - Dobson 4

12:45 pm
Ethicon Sustainability Lead
Sharon Connor

1:00 pm
Colorectal and General Surgeon
Nicholas Smith

---

08 May 2024

1:30 pm - 2:00 pm
ANZES PRESIDENT'S LECTURE - ASSOCIATE PROFESSOR MARK SYWAK (SYDNEY, AU)

Keynote Lecture - Endocrine Surgery - Dobson 2

1:30 pm
Intro of Mark
Christine O'Neill

1:35 pm
Minimally Invasive Adrenal Surgery: Surgical Technique and Avoiding Disaster
Mark Sywak

1:30 pm - 2:00 pm
KEYNOTE LECTURE - ASSOCIATE PROFESSOR ANDREW MACCORMICK (AUCKLAND, AOTEAROA NEW ZEALAND)

Keynote Lecture - Bariatric Surgery - Conway 1

1:30 pm
The Australia and New Zealand Bariatric Surgery Registry Results
Andrew MacCormick

1:30 pm - 2:00 pm
KEYNOTE LECTURE - DR NIKKI HOOPER (CHRISTCHURCH, AOTEAROA NEW ZEALAND)

Keynote Lecture - Orthopaedic Surgery - Conway 2

1:30 pm
LIONZ, women in orthopaedics, diversity in orthopaedics
Nikki Hooper

1:30 pm - 2:00 pm
KEYNOTE LECTURE - DR RACHELLE LOVE (CHRISTCHURCH, AOTEAROA NEW ZEALAND)

Keynote Lecture - Indigenous Health, Surgical Education - Dobson 4

1:30 pm
Responsibilities of a surgeon in anti-racism practice
Rachelle Love

1:30 pm - 2:00 pm
KEYNOTE LECTURE - DR RICHARD MARTIN (AUCKLAND, AOTEAROA NEW ZEALAND)

Keynote Lecture - Surgical Oncology - Conway 5

1:30 pm
Current state of the art melanoma care
Richard Martin

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR ANGUS WATSON (ABERDEEN, UK)

Keynote Lecture - Colorectal Surgery - Auditorium 4

1:30 pm
Training the next generation of surgeons
Angus James Watson
Should we train the next generation of surgeons to be specialists or generalists? Do all surgeons need to be medically qualified? Can surgeons be trained more quickly than they currently are? How do we reconcile that in the developed world surgery is delivered through minimal access incisions whereas in emerging healthcare nations there isn't a surgical robot in sight? This lecture will explore these questions and others. Is it time to rethink training for the next surgical generation?

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR CHRIS FORREST (TORONTO, CANADA AND SYDNEY, AUSTRALIA)

Keynote Lecture - Plastic & Reconstructive Surgery, Craniomaxillofacial Surgery - Bealey 2

1:30 pm
Experiences of craniofacial surgery in Sydney, Australia
Christopher Forrest

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR TIM UNDERWOOD (SOUTHAMPTON, UK)

Keynote Lecture - Upper GI Surgery - Conway 4

1:30 pm
High performance in surgery
Tim Underwood

1:30 pm - 2:30 pm
THE ANZ CHAPTER OF THE ACS "SCIENTIFIC FORUM" SESSION

Scientific Session - *Cross Discipline* - Waitaki

1:30 pm
Chair Introduction
Chris Pyke

1:35 pm
P16 as a prognostic biomaker for survival outcomes after salvage surgery for anal squamous cell carcinoma
Wei Mou Lim

1:43 pm
Multimodal eXplainable Artificial Intelligence Systems for the Pre-Operative Diagnosis of Thyroid Nodules
Karishma Jassal

1:51 pm

Inequities in ‘complication rescue’ and postoperative mortality for Maori following gastrointestinal cancer surgery in Aotearoa New Zealand
Cameron Wells

1:59 pm
Standardised Clinical Assessment and Management Plan (SCAMP) for Antibiotic Use in Acute Uncomplicated Sigmoid Diverticulitis: A Prospective Study
Ali Sarfarazi

2:07 pm
The impact decreasing acute burn reepithelialisation time by 22% has on morbidity utilising Negative Pressure Wound Therapy: a retrospective, modelled paper
Emma Lumsden

2:15 pm
A Randomised Control Trial to Compare Topical Use of Antibiotic Versus Conventional Management of Open Fractures
Dickson Wak

1:30 pm - 2:00 pm
THE HERBERT MORAN MEMORIAL LECTURE

Keynote Lecture - Breast Surgery, Surgical History - Dobson 1

1:30 pm
A history of advocacy in breast cancer - or how to just get things done!
Christobel Saunders

---

08 May 2024

2:00 pm - 3:30 pm
BARIATRIC SURGERY CLINICAL SCENARIOS

Scientific Session - Bariatric Surgery - Conway 1

2:00 pm
Best indications for OAGB – and when to avoid it
Karl Peter Rheinwalt
One Anastomosis Gastric Bypass (OAGB) has become the third most frequent bariatric/metabolic procedure worldwide. It is accepted as standard operation by the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO), by the American Society of Surgery of Metabolic and Bariatric Surgery, and many other national bariatric societies. This success is caused by its relative simplicity, low complication rates, short operative times, a steep learning curve and last but not least by its excellent outcomes concerning weight loss and remission of comorbidities. But, as other bariatric procedures this method has specific pitfalls and longterm complications which might cause certain limitations regarding the widespred indication for OAGB. In particular, this concerns the risks of biliary reflux especially in patients with pre-existing gastroesophageal reflux disease and the effects of malabsorption like steatorrhea and nutritional deficiencies. On the other hand, OAGB is an excellent operation to be be considered in patients with very high BMI, visceral fat distribution type, and most notably with metabolic syndrome. Based on a large individual experience with this procedure, the presentation will give a more detailed view of possible good and bad indications of OAGB as primary and revisional bariatric and metabolic operation.

2:20 pm
Bariatric surgery and obstetric outcomes
Greg Phillipson

2:40 pm
Bariatric Surgery in patients with liver cirrhosis and/or portal hypertension
Steven Kelly

3:00 pm
Bariatric surgery in patients with end stage renal failure
Nick Cross

3:20 pm
Discussion

2:00 pm - 3:30 pm
DEVELOPMENT

Scientific Session - Surgical History - Bealey 5

2:00 pm
Blades, speed or precision in Surgery-what matters most? The Changing Characteristic of the Surgical Cut since the 19th Century
Shelley McKellar
This presentation examines the instruments and intentions that influenced the surgical profession's shifting views on how and why to 'cut' into the living body. Surgeons debated blade edges and length, operator speed and precision, and more. Liston's amputation knife, Physick's tonsil guillotine, Gigli's chain saw, Galt's trephine, and Hey's saw are some of the eponymous instruments that will be discussed.

2:20 pm
The history of laparoscopic surgery
Tyler Ferdinands
Laparoscopy has revolutionised surgery, exhibiting an interesting development that was lead by numerous seminal characters in the field. It was initially experimented in dogs, in 1902 by George Kelling in Germany who laid the principal foundations. Eight years later, this approach was used on a human patient by Hans Christian Jacobaeus in Sweden. Following a series of developments and publications through the 1950s, before Tarasconi utilised endoscopic operative techniques to perform organ resection in 1976. This was the first published work detailing laparoscopic surgical resection. Shortly thereafter, Kurt Semm performed a laparoscopic appendectomy that would accelerate the use of laparoscopy in general surgery. Harsh criticism ensued at the hands of his colleagues, with appeals to revoke his medical license. Despite this, Semm was determined to pursue the potential this new technology demonstrated. Being a gynaecologist, he also pioneered techniques in laparoscopic-assisted vaginal hysterectomy, as well as forming a medical instrument company in Munich, Germany (one of the epicentres of current endoscopic equipment). Following this, further developments were propelled by advancements in technology. This immense technical feat has lead to other forms of minimally-invasive surgery, such as robotic-assisted surgery. The author aims to present the key events, figures, and technology related to the development of laparoscopy.

2:30 pm
The Legacy of Frederic Eugene Basil Foley: Innovations in Urologic Medical Devices
Damien Gibson
Frederic Eugene Basil Foley, an alumnus of Yale University and the Johns Hopkins School of Medicine, emerged as a prominent figure in medical innovation, particularly in urology. His career, initially fostered under the tutelage of Dr. William Stewart Halsted, transitioned to a focus on surgical research at Harvard University. Foley's most significant contribution was the development of the Foley balloon catheter, a groundbreaking urologic device created in collaboration with rubber chemist R.A. Lees and presented at the 1935 American Urological Association convention. Despite the absence of patent rights, Foley's design became widely distributed and remains a fundamental component in contemporary catheters. Additionally, Foley's contributions extended to the development of the Foley Operation for treating pelvic-ureteric junction strictures, the invention of the hydraulic operating table, a rotatable resectoscope, and the first artificial sphincter. His extensive impact on medical technology and techniques endures as a cornerstone in the field, even after his passing at 74 from lung cancer complications. Reference: Tatem, Alexander J., et al. "Frederick Eugene Basil Foley: His Life and Innovations." Urology, vol. 81, no. 5, 2013, pp. 927–931.,

doi:10.1016/j.urology.2012.12.035.

2:40 pm
150 years of endotracheal anaesthesia – a short history of modern anaesthesia on the 100th anniversary of Trendelenburg's death
William Theile
Introduction: This year marks the 100th year anniversary of Friedrich Trendelenburg's death (1844–1924) as one of the founders of modern anaesthesia. The German surgeon described the first endotracheal anaesthetic in man in the early 1870s, thereafter revolutionising anaesthesia and surgery for the next 150 years.1 Report: Although tracheotomy has been described as early as 2000BC, in modern medicine this was largely reserved as a life saving measure – particularly in cases of diphtheria as Trousseau described.1 It was not until 1871 that Trendelenburg used this method to secure a safe airway to administer an anaesthetic. Nine years later in 1880 William Macewen performed the first endotracheal intubation whilst excising a tumour at the base of tongue, avoiding aspiration of blood by isolating the trachea and packing the hypopharynx.2 The turn of the century then marked the initial stages of routine preoperative orotracheal intubation for ventilation during general aneasthesia. Franz Kuhn was the first to describe this, initially blindly passing endotracheal tubes into the larynx until 1913 when the first anaesthetic laryngoscope was invented by Jackson then modified by Magill.1 This report discusses major individuals and developments in modern anaesthesia at an important milestone in its history. References: 1. Ezri T, Evron S, Hadad H, Roth Y. [Tracheostomy and endotracheal intubation: a short history]. Harefuah. 2005 Dec;144(12):891-3, 908. Hebrew. PMID: 16400793. 2. Luckhaupt H, Brusis T. Zur Geschichte der Intubation [History of intubation]. Laryngol Rhinol Otol (Stuttg). 1986 Sep;65(9):506-10. German. PMID: 3537595.

2:50 pm
Evolution of the Tourniquet in Surgery of the Limbs: Stop the Bleed!
Roland Deek
BACKGROUND: The tourniquet has undergone significant advancement since its inception. We outline the evolution of the tourniquet in limb surgery and discuss the continuing importance of historic context. METHOD: A literature search was completed using Medline and Web of Science. RESULTS: The first recorded attempt at managing an arterial bleed was by Sushruta in 600 BC. Similar approaches were applied in ancient Rome using leather or bronze rings. Little progress was made over the next 1,500 years until Ambroise Paré, a French surgeon in the 16th century who used a ligature to control haemorrhage during a leg amputation. In 1674, Morell introduced the field garrotte, composed of a cord tightened by twisting a wooden rod. In 1718, Jean-Louis Petit displayed a pinned tourniquet that applied pressure directly over an artery. In 1864, Lister was likely the first surgeon to use a tourniquet in surgeries other than amputations. Johann Friedrich August von Esmarch introduced the use of a flat rubber bandage to exsanguinate a limb prior to applying a tourniquet in 1873. Harvey Cushing invented the pneumatic tourniquet in 1904, and this was further modified by Kirschner. In 1984, James McEwen invented the automatic tourniquet for surgery. This device automatically measured and applied the minimum pressure required to occlude arterial blood flow in a limb. CONCLUSION: The tourniquet has evolved to become indispensable in operations of the limbs, while continuing to provide life-saving control of bleeding in the emergency setting.

3:10 pm
Evolution of syringe
Tetyana Kelly
The evolution of the syringe stands as a testament to the relentless pursuit of medical innovation throughout history. Its origins trace back to ancient times, where early civilizations devised rudimentary tools to administer medicinal substances. The earliest recorded mention of a syringe-like device dates back to ancient Greece, around the 1st century AD. These early syringes were primarily hollow tubes made from materials like animal bladders or wood, used for enemas and irrigation of body cavities rather than injections. Advancements in syringe design emerged in the Middle Ages. Arab physicians utilized glass syringes with suction capabilities to draw blood or inject fluids. However, these devices lacked precision and standardized measurements, limiting their widespread use. The 19th century witnessed significant strides in syringe development. The advent of the hypodermic needle by French surgeon Charles Pravaz and Scottish physician Alexander Wood revolutionized medical practice. Pravaz's syringe, with a fine needle for subcutaneous injections, and Wood's refinement with a smaller and more manageable needle, marked a turning point in administering medications directly into the bloodstream. Further enhancements, such as the invention of the all-glass syringe by Heinrich Roussel, improved sterilization and facilitated the use of multiple medications without contamination. The 20th century saw the introduction of disposable plastic syringes, ensuring sterility and convenience while reducing the risk of infections. The history of the syringe represents an ongoing quest for safer, more accurate, and patient-friendly medical devices. Its evolution

reflects the intersection of medical need, technological advancements, and a commitment to improving healthcare delivery.

2:00 pm - 3:30 pm
EMPOWERING TRAINEES TO BE CHANGE MAKERS: ADVOCACY IN ACTION

Scientific Session - Indigenous Health, Surgical Education - Dobson 4

2:00 pm
How do supervisors and training programs enable trainees to be advocates?
Simon Fleming, Rhea Liang, Ruth Mitchell, Justin Cain, Jamie-Lee Rahiri, Margaret Schnitzler

2:30 pm
Discussion

2:00 pm - 3:30 pm
GLOBAL PAEDIATRIC SURGERY

Scientific Session - Global Health, Paediatric Surgery - Dobson 3

2:00 pm
Perspective from the Pacific
Basil Leodoro
Vanuatu is a classic example of the three delays in surgical services. Paediatric patients face even greater challenges due to delays in seeking health care, delays in transportation and delays in being seen by a surgeon with paediatric experience. Surgical work force development and training has produced a strong cadre of surgeons who are mainly located in Port Vila. Surgical outreaches and the support of visiting medical teams will continue to provide patients with the essential and timely care that is needed. A strong national focus on service delivery and safe access to surgery is pararmount including training for nurses, doctors and engaging in local and regional partnerships to strenghten paediatric services in Vanuatu.

2:20 pm
RACS outreach contribution
Phil Morreau

2:40 pm
Global surgery education
Sherif Emil

3:00 pm
WHO and children's surgery
Liz McLeod

3:20 pm
Panel Discussion
Liz McLeod, Sherif Emil, Henri Ford, Kiki Maoate, Phil Morreau, Basil Leodoro

2:00 pm - 3:30 pm
MEDICOLEGAL ASPECTS OF BREAST SURGERY

Scientific Session - Breast Surgery - Dobson 1

2:00 pm
Medicolegal implications of poor outcomes after oncoplastic and breast reconstructive surgery

Andrew Blandford

2:20 pm
New Zealand perspective on medicolegal implications of poor outcomes after breast surgery
Elizabeth Browne

2:35 pm
Clinician bias vs. patient demand: avoiding unnecessary surgery should underpin responsible surgical practice
Ben Green

2:50 pm
Evidence based practice and cost-effectiveness during global financial crisis: implications for the breast surgeon
Christobel Saunders

3:05 pm
Setting patient expectations: how to avoid common pitfalls in breast surgical practice
Elisabeth Elder

3:20 pm
Q&A

2:00 pm - 3:30 pm
MELANOMA ON A SHOESTRING BUDGET

Scientific Session - Rural Surgery, General Surgery, Surgical Oncology, Plastic & Reconstructive Surgery - Conway 5

2:00 pm
Building a regional melanoma service from scratch
William McMillan

2:20 pm
Faster cancer pathways: is melanoma care fair in Canterbury?
Stephanie Savage

2:30 pm
Realities of melanoma care in rgional centres
Brandon Adams

2:45 pm
Models of melanoma follow up
Daniel Wen
Melanoma incidence in New Zealand and Australia are amongst the highest in the world. In New Zealand it is the third most common cancer in both males and females. With increasing awareness and early recognition of melanoma in conjunction with an ageing population, there is an increasing number of patients requiring melanoma surveillance. In this presentation, current models of care and recommendations for melanoma follow-up will be presented as well as discussions around the future directions of melanoma follow-up.

3:00 pm
How do we measure value in melanoma care?
Lesly Dossett

3:15 pm
Panel Discussion: Economics in melanoma care
Chris Adams

2:00 pm - 3:30 pm
NEW TECHNOLOGY IN SURGERY - CAN IT BE INTRODUCED RESPONSIBLY?

Scientific Session - Trainees Association, Surgical Leaders, Medico-Legal, Younger Fellows, Quality & Safety in Surgical Practice, Senior Surgeons Program - Conway 4

2:00 pm
Is Artificial Intelligence better than Surgical Intelligence?
Bhavesh Patel

2:15 pm
IDEAL framework for Robot Assisted Surgery (RAS)
Guy Maddern

2:30 pm
Education and environmental responsibility in RAS
Daniel M Costello

2:45 pm
Use of RAS/technology in a “sustainable, equitable and quality improvement environment"
Kevin Bax

3:00 pm
Employing Large Language Models for Surgical Education: An In-depth Analysis of ChatGPT-4
Adrian Siu
Purpose – The COVID-19 pandemic has significantly disrupted surgical education, necessitating adaptations in curricula and teaching methods. Large language models (LLMs) hold potential in addressing these challenges by providing personalised feedback, facilitating engaging remote learning experiences, and offering virtual mentorship. Therefore, the aim was to evaluate the ability of LLMs to assist junior doctors in providing advice for common ward-based surgical scenarios of increasing complexity. Methodology – Utilising an instrumental case study approach, this study explored the potential of LLMs by comparing the responses of ChatGPT-4, BingAI and BARD. LLMs were prompted with common ward-based surgical reviews scenarios and tasked with assisting junior doctors with clinical decision-making. Outputs were assessed on their accuracy, safety, and effectiveness in order to determine their viability as a synergistic tool in surgical education. Results – The findings highlight the potential for incorporating LLMs into surgical education, with ChatGPT-4 demonstrating particular promise for delivery of reliable and accurate information. As assessed by our expert panel of surgeons, the advice provided by ChatGPT-4 was appropriate and safe for a doctor at the level of a first-year intern or resident. Conclusions – To optimise learning experiences and better support surgical trainees, future research should focus on refining the specificity of LLMs’ responses, exploring synergistic combinations with existing technologies, and aiming to enhance patient outcomes through the use of LLMs.

3:10 pm
Discussion

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - Upper GI Surgery, HPB Surgery - Conway 3

2:00 pm
Incidental intraoperatively detected Choledocholithiasis: General Surgeon’s approach to management
Jun Guang Kendric Tan
Background Up to 15% of patients with cholelithiasis have choledocholithiasis, with almost 10% not detected pre-operatively. Our study aims to quantify the prevalence of incidental choledocholithiasis during routine intra-operative cholangiogram (IOC), identify the best management pathway and reliable pre-operative predictive factors. Methods We performed a single centre, retrospective cohort study at St John of God Midland Hospital in Western Australia, Perth on 880 consecutive patients undergoing cholecystectomies by

15 surgeons between 2 January 2020 to 30 December 2021. Results Overall choledocholithiasis rates were 10.6% (93), with 4.0% (35) diagnosed pre-operatively and 6.6% (58) diagnosed during IOC. 50% of incidental choledocholithiasis during IOC was managed with hyoscine butylbromide, with 55.2% success rates. 22.4% of patients received Octreotide, with 61.5% success rates. 8.6% of patients underwent trans-cystic bile duct exploration (TCBE) and 8.6% underwent post-operative ERCP, both with 100% success rates. Choledocholithiasis most commonly presents with gallstone pancreatitis, with a median AST 7.2 times and ALT 7.8 times higher than patients without choledocholithiasis. The median CBD diameter on ultrasound was 8mm, CT scan was 11mm and MRCP was 9mm. Conclusion 1 in 10 cholecystectomies will be complicated with choledocholithiasis, and over half will be incidentally diagnosed during routine IOC. We propose intra-operative cholangiogram in all cases and hyoscine butylbromide, octreotide and saline flushes as first line treatment, and if unsuccessful, TCBE. Gallstone pancreatitis, markedly elevated AST/ALT and imaging showing CBD ≥ 8mm may serve as early predictors of choledocholithiasis.

2:10 pm
Global Evaluation and Outcomes of Cholecystectomy (GECKO): Multicentre, prospective cohort study (GlobalSurg 4) from 110 countries
Amanda Dawson
Purpose: Cholecystectomy is one of the most common operations globally, with laparoscopic surgery the “gold standard” approach. However, there is a paucity of global evidence for the variations of safe provision of cholecystectomy, including low- and middle-income countries. This international collaborative study by the GlobalSurg Collaborative will allow contemporaneous data collection on the quality of cholecystectomies using measures covering infrastructure, care processes and outcomes. Methodology: GECKO is a prospective, international, multicentre, observational cohort study delivered by the GlobalSurg Collaborative. Consecutive patients undergoing cholecystectomy between 31st July 2023 to 19th November 2023 were recruited, with follow-up at 30-days and one-year postoperatively. The study was undertaken at any hospital providing emergency or elective surgical services for biliary disease. The primary endpoint of this study is compliance with pre-, intra-, and post-operative audit standards. Secondary outcomes include rates of 30-day complications, achievement of critical view of safety and rates of gallbladder cancer. Results: The study has recruited 54,506 patients from 1260 centres across 110 countries (3570 patients in Australia and New Zealand). Australia recruited 73 centres across all states and territories, including metropolitan, regional and remote hospitals. Centre-level data have also been collected from >1400 centres globally. Results from this international cohort study will be presented during the meeting. Conclusion: This study collected routinely available data on a global scale and will inform future clinical practice.

2:20 pm
Effects of timing of cholecystectomy for acute biliary pancreatitis – a 12-year experience in Tasmania
Matthew Hutchinson
Purpose: Evidence-based guidelines recommend cholecystectomy during the index admission for mild acute biliary pancreatitis. In hospitals where patient throughput is paramount, it is often more expedient to book recovered patients for elective surgery. We sought to evaluate the outcomes of this practice in Tasmania. Methodology : A retrospective cohort study was conducted of patients with acute biliary pancreatitis between 2007 and 2018 using linked public hospital admissions and emergency department presentations, provided by the Tasmanian Data Linkage Unit. Patients were divided into two groups: early cholecystectomy (EC, during index admission), interval cholecystectomy (IC, after index admission). Results: The database included 3,503 pancreatitis patients, 1,008 were admitted for biliary pancreatitis. 289 patients were excluded due to having a prior or not documented cholecystectomy. Cholecystectomy was most commonly performed during the index admission (EC 409, IC 294 patients). 16 patients died during the index admission. Mean age was similar in each group (EC 54.3, IC 55.0 years). IC was associated with a longer total length of stay (8.0 vs 6.0 days, p=0.001). IC had a higher proportion of ICU admissions (17.3% vs 8.3%, p<0.001) and complications , including chronic pancreatitis (8.2% vs 4.4%, p=0.084) and pseudocysts (5.4% vs 1.5%, p=0.008). Conclusion : As with current guidelines, our results suggest clinical and cost benefits for patients undergoing index-admission cholecystectomy for acute biliary pancreatitis. Interval cholecystectomy should be reserved for patients with severe acute pancreatitis or other complications.

2:30 pm
The Optimal Bailout Technique: A Comparison of Subtotal vs Fenestrating Subtotal Cholecystectomy
Mohamed Zaafer Afzal
Bailout surgeries, such as fenestrating or reconstituting subtotal cholecystectomies (STC), are employed when extensive fibrosis or inflammation of the cystohepatic triangle prohibits safe dissection. The two STC procedures have raised concerns about potential complications. Notably, bile leaks have been identified as a frequent complication after fenestrated STC, leading to prolonged hospital admissions and additional

endoscopic retrograde cholangiopancreatography procedures. Additionally, the occurrence of a "smaller gallbladder" following reconstituting STC has raised apprehensions about remnant cholecystitis and the need for a completion cholecystectomy. This study aims to compare outcomes between the two STC procedures.Retrospectively compiled data on all STC procedures performed at the Northern Adelaide Local Health Network between 1999 and 2021 were analyzed using SPSS (IBM, NY, Version 28). Out of 99 cases, 84 patients underwent a reconstituting STC, and 15 underwent a fenestrating STC. Biliary leaks were recorded in 17% of reconstituting and 7% of fenestrating STC cases (p=0.320). Among patients who underwent a reconstituting STC, 4.7% (n=4) presented to the ED with biliary colic, and 3.6% (n=3) underwent completion cholecystectomy. The fenestrating group had significantly higher rates of post-operative bleeding than the reconstituting group (p<0.001). No significant differences were observed in other post-operative complications between the two STC approaches.These results support both STC approaches in managing difficult gallbladders. Given the risk of reoperation with a reconstituting cholecystectomy, albeit quite low, we recommend a fenestrating STC as the preferred approach when performing an STC.

2:40 pm
Quality of life following prophylactic total gastrectomy for CDH1 mutation carriers: systematic review
Brendan Desmond
Purpose CDH1 mutation carriers have a 70% lifetime chance of developing gastric adenocarcinoma, therefore Prophylactic Total Gastrectomy (PTG) is recommended from age 20. PTG is associated with significant post-operative morbidity and may have life-long sequalae. This is the first systematic review on quality of life (QOL) following PTG. Methods A systematic review was conducted according to the PRISMA guidelines. The Cochrane Register, MEDLINE, Embase, CINAHL, PubMed, and Scopus were searched for relevant papers. The primary outcome was global QOL. Secondary outcomes included physical, psychological, social and financial effects. Results 1152 manuscripts were screened and 8 papers were included, including a total of 388 patients. Across all studies there was a decrease in QOL scores by up to 50% in the months following PTG, this tended to return to baseline after 1 year, 88-100% of patients would undergo PTG again. Anxiety about developing cancer decreased after surgery, but there were significant long-term QOL issues related to physical symptoms such as dumping, psychological issues with depression and body image, financial and employment issues. Often these long-term issues did not improve and some studies found worsening QOL at 2 years due to these sequalae. Conclusion PTG is the only intervention that can prevent gastric carcinoma in CDH1 mutation carriers. Surgery leads to a transient decrease in overall QOL. However, there are significant long-term physical, psychological and social issues. Despite this, patients are generally satisfied with their choice. This review can further assist in counselling these patients for this life-changing surgery.

2:50 pm
Predictive criteria for oesophageal perforations in patients with pneumomediastinum – can invasive diagnostic modalities be avoided?
Justin Hsieh
Purpose: This retrospective study aims to study the incidence of oesophageal perforations (OP) in cases of pneumomediastinum (PNM) diagnosed on high-resolution computed tomography (CT). The primary objective is to identify clinical, biochemical, and radiological predictors of OP to help clinicians decide on the need for further investigations and treatment. The study seeks to determine if a set of criteria can reliably predict the incidence of OP. Methodology: A retrospective analysis of 427 adult patients was conducted with index CT scan reports containing 'pneumomediastinum' from January 2016 to December 2022 at a single tertiary institution. Patients with known PNM and recent interventions were excluded from the study. Patient demographics, symptoms, biochemical markers, and radiological findings were all recorded and various statistical methods were used to analyse variables as predictors of OP. Results: 336 patients with PNM were included in this study, from which 22 patients were identified with OP. The study identified several statistically significant risk factors for OP, with the leading presenting complaint of dysphagia having a p-value of 0.003. Patients with no reported symptoms also reliably excluded OP, with a p-value of 0.002. Radiological findings of pleural effusion, mediastinal free fluid, and disruption of oesophageal wall were all highly significant features of OP with a sensitivity exceeding 80%. Conclusion: This study endeavours to enhance clinical decision-making in PNM cases by providing insights into the risk factors for patients with OP. The results may contribute to the formulation of an algorithm that can aid clinicians in risk stratifying patients and minimising unnecessary further investigations.

3:00 pm
Quality of Life following Repair of Large Hiatal Hernia is Not Influenced by Mesh - A 5 Year Follow-Up Study
Mathew Amprayil
Introduction: The use of prosthetic mesh in laparoscopic repair of large hiatus hernias remains controversial. Clinical and quality of life outcomes of a randomized control trial (RCT) of mesh versus suture repair

previously showed few differences at early follow-up. This study evaluated long-term quality of life outcomes from that trial. Methods: A prospective, multicentre, double blind RCT assessed three methods of repair for large hiatus hernias: sutures-only vs absorbable mesh vs non-absorbable mesh. Quality of life was assessed using the Short-Form 36 (SF-36) questionnaire which was completed preoperatively and then at 3, 6, 12 months following surgery and annually thereafter. Patients who completed the questionnaire up to 5 years after surgery were included in this analysis. SF-36 outcomes were compared across the 3 repair techniques, and to earlier baseline and 12-month outcomes. Results: 126 patients were randomized – 43 - suture-only, 41 - absorbable mesh and 42 - non-absorbable mesh. Questionnaires were completed by 118 patients preoperatively, 115 at 12 months and 98 at 5 year median term follow-up. There were no significant differences between the repair techniques for the subscale and composite scores at 5-year follow-up. The mental component score improved significantly after surgery and was sustained across 5 years for all techniques. The physical component score also improved significantly but was lower at 5-years compared to the 12-month follow up for both mesh groups. Conclusion: Surgical repair of large hiatus hernias provides sustained long-term improvement in quality of life. The addition of mesh does not influence quality of life.

3:10 pm
Gastric Conduit Peristalsis, anatomy and emptying – challenging our current assumptions: Detailed analysis using Dynamic Magnetic Resonance Imaging
Kaleb Lourensz
Purpose: Physiological function, anatomy and emptying of the gastric conduit are important in mediating gastrointestinal symptoms and quality of life post oesophagectomy. Anatomy, peristalsis and transpyloric flow are incompletely defined. We aimed to analyse gastric conduit function using dynamic MRI to evaluate dynamic anatomy, peristaltic function and emptying. Methodology: Eighteen conduits and 12 controls were recruited. Peristalsis variables including Gastric Motor Index (GMI) were measured at 4 time points throughout the MRI, and volume scans were taken at the beginning and end of the 20-minute scanning period. Quality of Life questionnaire data was collected. Results: Nine(50%) conduits demonstrated coordinated peristalsis, 3(16.7%) no peristalsis and 6(33.3%) incoordinate peristalsis. Regarding conduits vs controls, there was no difference in peristaltic wave frequency (5 vs 5) or GMI (35.45 vs 36.5,p=0.61), but emptying was slower (0.10% vs 15% p=0.01). Acute angulation was associated with slower emptying (444 vs 127 min, p=0.025). Conduit width and location of the pylorus relative to the hiatus made no significant difference. Quality of life scores were significantly better in controls compared with conduits. Conclusion: Many conduits demonstrated peristalsis, but no relationship was found between peristalsis and conduit emptying, whereas conduit shape and placement within the mediastinum were significant. Impaired emptying in the presence of gastric body peristalsis appeared centred at the pylorus and this differentiated conduits from controls. Dynamic MRI is a promising research and diagnostic tool to assess conduit function due to its capacity to accurately delineate the key elements of conduit function.

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - Hand Surgery - Bealey 3

2:00 pm
What makes the perfect incision? Advancements of the Brunner Hand Incision.
Daphne Wang
Dr J Brunner's work stemmed from his experience as a military surgeon mostly operating on hand injuries resulting from factories. He reported the ideal digital incision would allow for maximal exposure of nerves/vessels and tendons without compromising sensate, vascular skin flaps. The Brunner excision was revolutionised in 1967 describing a 'zig zag' incision between flexion creases allowing for good visualisation to structures, preservation of neurovascular bundles and viability of skin flap. This remains one of the most used volar hand incisions to date. Dancey et al in 2008 pitched a modified Brunner incision creating small flaps of varying size in existing skin creases. These flaps were marked on either ulnar or radial side of the finger when the finger is placed in a position of maximal flexion. This created V shaped flaps once the finger was in an extended position. The flaps were different sizes to reflect the difference in range of movement at the DIPJ and PIPJ. This can be used for both trauma and elective hand surgery cases. Saun et al in 2020, dubbed the volar oblique incision starting proximal to the DIPJ medial to the neurovascular bundle. This extended obliquely along the volar surface of the digit across the PIPJ ceasing just distal to the MCPJ preserving the neurovascular bundle laterally. The predominate use was for adequate exposure of PIPJ with advantages such as lower incidence of flexion contracture and better scarring outcomes. Thus, the perfect

incision is based on core principles of adequate exposure and preservation of neurovascular structures without compromising flap integrity.

2:09 pm
Is there an optimal surgical incision for the hand?
Hollie Moran
Purpose Surgical approaches in hand surgery are varied and there is considerable debate regarding the best incision types. Skoog described his approach for Dupuytren's contracture, whilst Bruner's incisions are widely utilised for many conditions. Trauma demands a degree of adaptability as traditional incision patterns may not always be appropriate. We discuss here the different incision patterns for hand surgery. Methodology A literature review was completed. Local hand surgeons in South Australia were interviewed about their preferences on surgical incisions. Photos of lacerations were shown with surgeons marking their planned incisions. Results There are few articles tackling this complex area. Most surgeons agreed on incision preference. There was variability in marked incision patterns. The advantages and disadvantages of each incision type were summarised. Conclusion The optimal incision for hand surgery is likely to remain a matter of surgeon preference, and we have presented here a thorough review on the advantages and disadvantages of the different options. Increased knowledge of the variety of skin incisions for hand surgery, their advantages and disadvantages and applications for each can result in safer hand surgery with better functional and cosmetic outcomes.

2:18 pm
Unusual Encounter: Platypus Sting Injury to the Palm and the Potential Role of Surgery on Expedited Recovery
Hugo Loveday
This presentation explores the unique case of a patient who experienced a platypus sting on their hand, resulting in a brief hospital admission for a washout procedure. Platypus stings are rare and often unfamiliar to healthcare professionals, making this case particularly noteworthy. There are limited cases in literature of platypus envenomation, with one case report describing a necessary 6 day admission for pain refractory to opioids and regional anaesthesia (Fermer et al, 1992). Platypus venom is not directly toxic to humans, and the mechanism for refractory pain is not well understood. Our experience was distinct in the role of surgery in the patients care. The presentation briefly describes the physiology of platypus stings, and delves into the clinical presentation, diagnostic challenges, and the management approach in this patients case. Due to zone of the injury and mechanism, and operative exploration and washout was performed. Unlike the case in literature, this patient had a 24 hour admission and was analgesia free at 2 weeks. While it is difficult to draw conclusions from case reports, this suggests that there could be a role for empiric washout in acute Platypus envenomation. In rare and unusual cases such as this, documentation of positive outcomes is particularly important as a reference point in future patient care. In completing an operation for an empiric indication for acute hand surgery, we present our experience an excellent patient functional result, with this very unique case. Platypus envenomation — a painful learning experience Peter J Fermer MRCGP. DRCOG, FACTM, John A Williamson BSc. DA(Melb) FANZCA. DipDHM. FACTM, David Myers BA. FFARACS

2:27 pm
Free venous flap with complete intradigital anastomosis
Tetyana Kelly
Digital injuries, often resulting from trauma, tumour resections, or congenital anomalies, demand meticulous reconstruction to restore both form and function. Free venous flaps represent a paradigm shift in digital reconstruction especially when it comes to reconstructing defects with exposed tendons, bone, or joints. In recent years, the use of venous flaps in hand surgery has gained recognition for its versatility and effectiveness. Unlike traditional local or loco-regional flaps in hand surgery, free venous flaps may be connected to digital vessels with minimal dissection, thus reducing the burden of postoperative oedema and scarring. This allows an early active range of motion and hence improved hand function. This case report explores the application and significance of venous flaps in hand surgery, emphasizing their role in achieving precision reconstruction.

2:36 pm
Outcomes of using Biodegradable Temporising Matrix to maintaining length, function and aesthetics in hand and digit injuries
Toby Vinycomb
Hands or digits with denuded bone and tendon have traditionally required local, regional or free tissue reconstruction with a compromise in function, aesthetics and donor site complications. Alternatively affected digits may have been terminalised with loss of critical length but the benefit of more rapid wound

healing times. NovoSorb Biodegradable Temporising Matrix (BTM) offers the enticing intermediate option of maintaining hand function, digit length and aesthetic resurfacing of hand and digit wounds without many of the drawbacks of vascularised soft tissue reconstruction. Select case reports or short series (six patients or fewer) have been published on the use of NovoSorb BTM in upper limb wounds with positive outcomes. However, these reports have predominantly focused on the resurfacing and healing of larger cutaneous wounds of the arm and forearm rather than maintaining hand function. Furthermore, there has been no studies directly examining the outcomes of NovoSorb BTM to maintain digit length. We present a series of 11 cases of hand and finger injuries with NovoSorb BTM used to maintain digit length, or resurface volar or dorsal hand defects, with medium-term (<12 month) and long-term (>12 month) follow up. We provide a pictorial review, discuss alternate reconstructive options (with their relative benefits and drawbacks), and present the clinical, aesthetic and functional outcomes of these cases.

2:45 pm
The surgical management of taxane induced paronychia: An adjunct for rapid symptomatic relief
Toby Vinycomb
Nail changes can be a common side effect of many chemotherapy agents. Changes can include nail discolouration, nail ridging, onycholysis, paronychia and nailbed pyogenic granulomas. These changes are most commonly associated with taxane chemotherapy agents (e.g. paclitaxel) affecting up to 51% of patients on treatment. Paronychia and nailbed pyogenic granulomas can impact self-care activities of daily living (ADLs) when affecting the hands, and be an impediment to walking when affecting the feet. Medical management (analgesia, antiseptic baths, trimming onycholytic nail plates, application of topical steroid cream, oral antibiotics) has its role in early paronychia. However, more advance disease (purulent paronychia and nailbed pyogenic granuloma) may require surgical treatment to avoid reduction (or cessation) of the chemotherapy agent. Despite this, there is no published evidence on the outcome of surgical management for taxane induced nail complications. We present the case of a 43-year-old female on adjuvant paclitaxel and Herceptin for breat cancer. She was referred to our surgical service with bilateral hand, and then bilateral feet paclitaxel induced onychomycosis, paronychia and nailbed pyogenic granulomas. She had already completed two courses of oral antibiotics without improvement. We performed a mixture of surgical interventions in a single stage – individualised to the severity of each digit - to successfully treated our patient without recurrence at three months. Alongside the pictorial review, management and outcome of our case, we will discuss the staging and different treatment strategies offered by the literature and how surgeons can play a role in management this potentially debilitating side effect.

2:54 pm
Proximal Phalanx fractures: Conservative management with Mobilisation Splinting
Tetyana Kelly
Proximal phalangeal fractures are tricky to treat because of high ratio of bone to tendon contact, which can increase adhesions. Adhesions formed between the extensor mechanism and the fracture may result in loss of extensor glide and resultant extensor lag at the proximal interphalangeal joint (PIPJ). Tethering of flexor digitorum profundus (FDP) can also result in decreased distal interphalangeal joint (DIPJ) flexion. These fractures ‘typically’ exhibit a distal end dorsal angulation with volar apex. Intrinsic muscles flex the proximal fragment, the distal fragment is extended by the attachment of the central slip to the dorsal lip of the middle phalanx. Volar apex and dorsal angulation of more than 15 degrees results in decreased efficiency of the extensor mechanism. Sagittal bands tighten causing progressive extensor lag, which is accentuated by phalangeal shortening. This subsequently leads to a fixed joint contracture. Burkhalter & Reyes (1984) proposed that unstable proximal phalanx fractures can be stabilised by exploiting the extensor apparatus. When metacarpophalangeal joint (MCPJ) flexes the extensor mechanism shifts distally two-thirds, embracing and directing compressive forces to the volar cortex increasing fracture stability. Our protocol includes closed extra-articular base or shaft fractures, initially unstable but correctable, similar with rotation correctable through closed reduction or positioning in clinic. All our patient had excellent results, without any rotation, malunion, non-union and achieving full grip before 12 weeks.

3:03 pm
A literature review and case report of prophylactic antibiotics in leech therapy
Justin Hunt
Purpose: The presentation describes a case of a five-finger replant, complicated by clostridium difficile colitis requiring total colectomy following leech therapy with antibiotic prophylaxis. It presents a literature review of antibiotic prophylaxis in hirudotherapy and discusses risks and complications. Background: A teenage boy suffered traumatic five-digit amputation. An 18-hour operation was performed resulting in successful five-digit replantation. Day three post-operatively venous compromise was noted, and leech therapy initiated with Bactrim as antibiotic prophylaxis. Within 48 hours the patient deteriorated secondary

to severe clostridium difficile colitis. After failure of medical therapy, total colectomy with ileostomy was performed. Hirudotherapy is utilised within plastic and reconstructive surgery for venous compromise in flaps or digital replants. It may be complicated by aeromonas infections in 2.4-36% of cases, and subsequently most authors advocate for antibiotics prior to therapy until 24 hours after. A four-year review of leech therapy found an infection rate of 20%, and a statistically significant association between antibiotic prophylaxis and reduced incidence of infection (26% vs 13%). Despite this, a UK study found 24% of units didn't use prophylaxis, and 57% used potentially ineffective agents, oft citing risks of antibiotic therapy. Conclusions: Within the literature, numerous articles describe benefit of prophylactic antibiotic therapy in hirudotherapy. In all surgical patients, treatment with antibiotics can be associated with severe complications and should be reserved for evidence-based indications.

3:12 pm
Volar cortical torsion of distal radii
Anika Radojkovich
Purpose: Internal fixation for distal radius fractures often relies on pre-contoured volar plates. Malrotation is a common issue in distal radius fractures and biomechanical studies suggest this can lead to radio-ulnar dysfunction. Despite this, the degree of rotation that exists at the distal radius has not been well examined. We aim to establish a new measurement to quantify the degree of rotation which is clinically relevant in designing and choosing a volar plating system. Method: CT scans of patients from the North Shore Hospital acute trauma list that presented with suspected carpal pathology were retrospectively analysed. The volar cortical torsion (VCT) was calculated at the distal aspect of the pronator fossa. This is of clinical importance as this also forms the safe boundary for placement of the plate. The point on the radius where the volar surface transitions from concave to convex was the reference point for the measurement. Measurements were taken independently by two observers. Results: The mean VCT was 4.9 degrees with a standard deviation of 2.8 degrees. There was strong correlation for interrater reliability. There was an intra-class correlation coefficient (ICC) of 0.96 ($p<0.0001$) and Bland-Altmann limits of agreement showed an average bias of -0.16 with limits of agreement from -1.82 to 1.50. There was also strong correlation for intrarater reliability with an ICC of 0.94 ($p<0.0001$) and Bland-Altmann limits of agreement having an average bias of -0.18 with limits of agreement from -0.07 to 0.42. Outcome: While there is variability within the population, our method shows the VCT can be reliably calculated. This can be useful when selecting a volar plate for internal fixation to prevent malrotation.

3:21 pm
Calculating relative metacarpal lengths and predicting individual metacarpal lengths in injury and reconstruction
Timothy Studley
Background Metacarpal fractures are common and can often be managed non-operatively with excellent outcomes. Shortening, angulation or displacement of the fracture can be indications for operative management. Biomechanical studies examining the effects of metacarpal shortening on extensor lag, pinch strength and intrinsic muscle function have shown significant detrimental effects at roughly 5mm of shortening. Estimations of shortening in a clinical setting are made from plain film Xrays and current methods significantly overestimate the degree of shortening. We aim to describe the relative lengths of metacarpals measured on Xray and use this to more accurately calculate shortening in a fractured metacarpal. Methods 200 plain film AP Xrays of the hand performed for the purpose of ruling out injury were analysed and the lengths of the 2nd to 5th metacarpals measured. Xrays were stratified by sex, age and laterality, and only patients aged 18 and above were included. Metacarpal lengths were examined to assess their relationships to eachother Results The lengths of the second to 5th metacarpals were 69.2mm, 67.03mm, 59.6mm and 54.8mm respectively. The 5th MC was on average 0.78x the length of the 2nd metacarpal. Conclusion We have described the lengths and relative lengths of the 2nd to 5th metacarpals. This data can be used in the future to assist with translation of biomechanical studies into clinical practice, and assist in clinical decision making.

2:00 pm - 3:30 pm
SAGITTAL SYNOSTOSIS MANAGEMENT IN AUSTRALIA AND NEW ZEALAND

Scientific Session - Craniomaxillofacial Surgery, Plastic & Reconstructive Surgery - Bealey 2

2:00 pm
Endoscopic Strip Craniectomy - The Sydney Approach

Christopher Forrest

2:15 pm
Springs-assisted cranioplasty - The Auckland Approach
Jonathan Wheeler

2:30 pm
Calvarial Vault Remodelling - The Melbourne Approach
Jonathan Burge

2:45 pm
Sagittal synostosis treatment - the Adelaide Craniofacial Approach
Mark Moore

2:55 pm
Discussion

2:00 pm - 3:30 pm
THE MARK KILLINGBACK RESEARCH PAPER PRIZE SESSION

Scientific Session - Colorectal Surgery - Auditorium 4

2:00 pm
SynOPsys-CRC: Development of ANZ Colorectal Cancer Synoptic Operation Reports
Amanda Nikolic
Background: Accurate surgical documentation is important for patient safety. Narrative operation reports (NRs) have inherent limitations which hinder comprehensive reporting and effective analysis. Synoptic operation reports (SRs) offer a standardised alternative allowing for efficient data capture. This study aims to develop a standardised synoptic operation report for colon and rectal cancer (CRC) resections in Australia and New Zealand (ANZ). Methods: A literature review identified key factors for SR inclusion. An expert panel from the Australian and New Zealand Training Board in Colon and Rectal Surgery reviewed and provided input on standard reporting domains. A survey among members of the Colorectal Surgical Society of Australia and New Zealand collected opinions and feedback on the draft SR. The final SR was developed based on consensus from the expert panel and survey results. Results: Survey results showed positive opinions on SRs, with 83% of respondents supporting their use. Feedback highlighted concerns about the length of the SR, integration into existing electronic medical record systems (EMRs), and potential benefits for research and data collection. Conclusion: This study presents a standardised SR for CRC resections in ANZ. Challenges include resistance to change and the need for integration with EMRs at individual institutions. The authors emphasise the iterative nature of SR development, seeking ongoing feedback for future refinements and the keep pace with changes in care. The introduction of an ANZ SR for CRC is an important step towards improving surgical documentation and fostering potential advancements in care.

2:09 pm
Significant reduction in length of stay through introduction of an outpatient management protocol for uncomplicated left sided diverticulitis with no change in readmission rate
Joshua Balhorn
Purpose Acute diverticulitis is a common presentation to hospital emergency departments, and a significant burden on healthcare resources worldwide. Multiple studies have shown that outpatient management of uncomplicated diverticulitis is safe, yet many patients are still treated in hospital. We instituted a protocol for the outpatient treatment at our institution focusing on safety and healthcare costs. Methodology From February 2021 the new outpatient management of uncomplicated left sided diverticulitis protocol was implemented; all patients that presented through the emergency department with a computed tomography diagnosis of uncomplicated left sided diverticulitis were managed as an outpatient with oral antibiotics unless they met exclusion criteria (insulin requiring diabetes, immunosuppression, active malignancy, pregnancy or inflammatory bowel disease). This was compared to a historical comparison immediately prior. The primary outcome of interest was length of stay in hours. Results There were 106 patients in each group. The length of stay in the outpatient group was 29.7 hours less than the inpatient group (95%CI 21.9 to 37.5. P=<0.001). In a multivariable regression analysis, having adjusted for the effects of previous surgery for diverticulitis, COPD, ASA and age, patients in the outpatient

cohort length of stay was 30.7 hours less compared to the inpatient cohort (95%CI 23.4 to 97.9, P<0.001). The odds of readmission were not different between the outpatient and inpatient cohorts (OR 1.49, 95%CI 0.544 to 4.07, P=0.438). Conclusion Outpatient management for uncomplicated left sided diverticulitis results in significant reduction of length of stay and did not result in an increase in readmissions.

2:18 pm
Indocyanine Green and height of anastomosis in colorectal surgery – a network meta-analysis
Kar Yin Fok
Purpose: Anastomotic leak is a serious complication of colorectal surgery, with perfusion and height of anastomoses known to be risk factors. Indocyanine green (ICG) is commonly used in fluorescence angiography (FA) for perfusion assessment though techniques vary. This is a network meta-analysis comparing use of ICG-FA and height of anastomosis for left sided colorectal anastomoses and rates of anastomotic leak. Methodology: A systematic review was performed including all adult clinical studies using ICG-FA in colorectal anastomoses. A network meta-analysis was performed to compare high and low anterior resections and the use of ICG for the outcome of anastomotic leak. Results: Of some 49 clinical studies retrieved during review, 19 were included in meta-analysis in comparison of high and low anterior resection with and without ICG and anastomotic leak rates. Odds of leak were greater in low compared to high anastomoses, ICG is protective in both but odds of 0.42 (CI 0.29-0.58) show it is most protective in low anterior resection. Conclusion: There is benefit of ICG for both high and low colorectal anastomoses, but more so for low joins. Standardisation of technique with routine usage of ICG for low colorectal anastomoses should be considered.

2:27 pm
Will the petri dish promise of neutrophil extracellular traps translate to patient outcomes in colorectal cancer?
Georgia Carroll

2:36 pm
Preliminary results for the ACCORD study: a national audit of watch and wait approach in patients with rectal cancer in Aotearoa New Zealand
Matthew McGuinness
Purpose The rate of organ preservation in patients with rectal cancer is increasing worldwide. This is likely due to the adoption of a watch and wait (W&W) approach in patients with a complete clinical response following neoadjuvant therapy. Despite widespread use, data on outcomes in Australasia is lacking. The aim of this study is to investigate outcomes associated with W&W in Aotearoa New Zealand (AoNZ). Methodology A retrospective, national cohort study of patients managed with W&W between January 2015 and December 2022 in AoNZ was performed. This study was run by STRATA, a student- and trainee-led collaborative. The Cancer Registry and the National Minimum Data Set were linked to identify a longlist of patients who had rectal cancer, received neoadjuvant therapy, but had not had a colonic resection. Mini research teams in 17 hospitals across AoNZ then screened this longlist of patients for inclusion and data collection. Results 1505 patients were screened. 132 were included. Mean age was 70.5, 36% were female, 76% were NZ European, and 6% were Māori. Median follow up was 1.9 years. 2-year cumulative incidence of local regrowth was 17.5%(95%CI 10.0-24.4%). 91.7% of regrowth was present in the bowel wall. 70.8% of patients with local regrowth underwent surgery, all with curative intent. Distant metastasis rate was 8.4% at a median 1.3 years. 2-year overall survival was 92.9% (95%CI 87.4-98.8%). Conclusion This is the first study to investigate the use of the W&W approach in AoNZ. Clinical outcomes were in keeping with international studies, with acceptable rates of local regrowth and excellent overall survival. This data will help guide clinicians and inform patients in AoNZ.

2:45 pm
Does gut microbiome play a role in the pathogenesis of diverticular disease – mucosal biopsy analysis using 16S rRNA gene sequencing
Sarit Badiani

2:54 pm
PREDICTORG – A Multicentre Personalised Medicine Approach in the Management of Colorectal Peritoneal Metastases
Anshini Jain
Colorectal Peritoneal Metastases(CPM) develop in 13% of CRC patients, however, a subset of patients can be offered Cytoreductive Surgery(CRS) with Hyperthermic intraperitoneal chemotherapy(HIPEC), with favourable median survival of 40months, compared to 16months on systemic-therapy alone. PRODIGE-7 has questioned the efficacy of HIPEC, demonstrating no survival benefit of CRS+OX-HIPEC when compared to

CRS alone, creating clinical equipoise in the management of CPM. PredictORG is a novel translational study that identifies the best HIPEC drug for individual patients based on in-vitro sensitivity demonstrated by patient-derived organoids. Intra-operative CPM-biopsies were collected from three interstate peritonectomy centres (RPAH, TQEH and PMCC) and transported to PMCC for tissue processing, organoid cultivation, and drug screening. Patients' organoids were incubated for 4 days and exposed to HIPEC drugs. A machine learning algorithm was developed to identify organoid viability unique to each patient's organoid phenotype. Across the three sites, 27 patients were recruited and an overall organoid success rate was 77%(14/18). The mean time to successful organoid cultivation was 17.8(8-34) days and time drug assay result 24.8(15-41)days. Success rates did not differ between local and interstate samples (PMCC (6/8)75%; RPAH(6/8)75%; TQEH(2/2)100%). Overall, multicentre tissue retrieval, organoid cultivation and drug screening is feasible within the 4-week period that patients are optimised for their definitive CRS and HIPEC. There is consensus from all Australian peritonectomy centres to proceed to a funded nationwide translational clinical trial investigating the improvement in oncological outcomes utilising this translational, personalised medicine approach.

3:03 pm
Vascular pedicle dissection time in laparoscopic colectomies as a novel marker of surgical skill.
Isaac Tranter-Entwistle
Purpose Colorectal resections for benign and malignant diseases are common. Outcomes after surgery are dependent on patient, pathology and operative factors. Existing validated surgical skills scores are directly correlated to outcomes, but are time consuming. The vascular pedicle dissection time (VPDT) can be used as a 'real-time' marker to assess surgical skills. The aim of this study is to assess the VPDT and benchmark it against validated surgical skill score. Methodology A prospective multicentre study was performed in New Zealand including all laparoscopic colorectal resections. Patients were excluded if the vascular pedicle was taken open. Data was obtained about patient, operation and histology characteristics. The VPDT was calculated from retraction of the vascular pedicle to completion of that step of the operation. The competency assessment tool (CAT) was used and each laparoscopic video was scored by two independent colorectal surgeons. The CAT score was grouped into quartiles. Results 154 patients were included between December 2020 and November 2023, 74 (48.1%) right sided and 80 (51.9%) left sided resections. Median VPDT was significantly different between the different CAT score groups for left sided resection (lower 17min, middle 12 min, higher 11 min, p=0.075) but was not for right sided resections (lower 44min, middle 41 min, higher 25 min, p=0.005). There was no significant difference in R1 resection, anastomotic leak rate, occurrence of Clavien Dindo >3 complications or re-admission between the CAT groups. Conclusion This study was not powered to assess for surgical outcomes. It shows that the VPDT correlates to the CAT score and can be useful marker to assess a surgeon's learning curve and skills.

3:12 pm
Does Complete Pathological Response Increase Perioperative Morbidity Risk in Rectal Cancer?
Thomas Tiang
Purpose This study compares the morbidity between patients with locally advanced rectal cancer who have had a pathological complete response (pCR) or not after neoadjuvant chemoradiotherapy and Total Mesorectal Excision (TME). Methods A retrospective cohort study was conducted from the Binational Colorectal Cancer Audit (BCCA), that identified patients with locally advanced rectal cancer (<15cm from anal verge) from 1st of January 2007 to 31st December 2019. Patients were included if they had locally advanced rectal cancer and had undergone neoadjuvant chemoradiotherapy and proceeded to surgical resection. Results There were 4584 patients that satisfied the inclusion criteria, 65% being male, with a mean age of 63 years, and 11% having pCR (ypT0N0). Both major and minor complications were higher in the TME without anastomosis group (17.3% vs 14.7%, and 30.6% vs. 20.8% respectively), and the 30-day mortality was 1.31%. In the TME with anastomosis group, pCR did not contribute to higher rates of surgical complications, but male gender ($p<0.0012$), Age ($p<0.0001$), pre-op N stage ($p=0.0092$) and ASA ≥ 3 ($p<0.0002$) did. PCR had no significant effect ($p=0.44$) but male gender ($p=0.0047$) and interval to surgery ($p=0.015$) contributed to higher rates of anastomotic leak. In the TME without anastomosis cohort, the only variable that contributed to higher rates of complications was ASA ≥ 3 ($p=0.033$). Conclusion Patients undergoing TME dissection for rectal cancer following NCRT showed no difference in complications whether they had achieved pCR or not.

3:21 pm
Right versus Left Colorectal Cancer – Where Do We Draw the Line?
Joshua Lansom
PurposeNo consensus on the definition of right and left colorectal cancer (CRC) exists, nor studies offering histological or molecular basis for such categorisation. This study investigated the regional variations in the histological and molecular characteristics of CRCs, with the objective of determining an optimal division

point between right and left CRCs.MethodsAn observational study of consecutive patients who underwent CRC resection (1995-2022) at Concord Hospital, Sydney was performed. Clinicopathological data were extracted from a prospective database and seven permutations of right-left divisions considered. Logistic regression tested association between the right-left divisions and pathological characteristics. Receiver operating characteristic and area under the curve (AUC) analyses determined the discriminative ability of each division to predict 18 pathology characteristics. Results3,753 patients underwent a CRC resection (2,120 male; mean 69.5yrs [SD12.6]). There was regional variation in tumours with respect to tumour infiltrating lymphocytes (TILs), mismatch repair deficiency (dMMR), and mutant BRAF (mBRAF). Left-sided tumours were less likely to demonstrate TILs (P<0.001), be dMMR (P<0.001), and express mBRAF (P<0.001). Division at the descending-sigmoid junction yielded highest discriminative abilities: TILs – AUC 0.66, dMMR – AUC 0.76, and mBRAF – AUC 0.73.ConclusionThis is the first study to provide a pathological basis on which right- and left-sided cancers may be defined, and found the optimal division point between the right and left colorectum to be at the descending-sigmoid junction. Further research is needed to determine whether this can facilitate individualised patient management.

2:00 pm - 3:30 pm
THYROID SURGERY

Scientific Session - Otolaryngology Head & Neck Surgery, Endocrine Surgery - Dobson 2

2:00 pm
Anaesthetic approach to the complex thyroid
Pippa Jerram

2:20 pm
Peri-operative Management of the Injured Recurrent Laryngeal Nerve
Shamir Chandarana
The presentation will cover the following: 1) review of relevant anatomy of the recurrent laryngeal nerve 2) appropriate pre-operative assessment of nerve function 3) surgical approaches to locating the nerve 4) possible mechanisms of injury to the nerve 5) role of intraoperative nerve monitoring 6) types of nerve injury and the associated intra-operative and post-operative management strategies.

2:40 pm
Retrosternal goitres
Frédéric Triponez

3:00 pm
Final Comments -
Ben Chan

3:01 pm
Panel discussion - interesting thyroid cases

2:00 pm - 3:30 pm
TRANSPLANT AND RENAL ACCESS

Scientific Session - Transplantation Surgery, Vascular Surgery - Bealey 4

2:00 pm
Surgical Revision vs Endovascular Repair of Juxta-anastomotic Stenosis in Radiocephalic Fistula
Limi Lee
Purpose: To determine and to compare reintervention rate and secondary patency of radiocephalic fistula (RCF) after intervention of the juxta-anastomotic stenosis between surgical and endovascular repair. Methodology: All RCF with intervention to the juxta-anastomotic stenosis from 1 January 2017 to 31 December 2020 were recruited. Demographic details, types of intervention either surgical revision (proximal turndown of the RCF) or endovascular repair and reintervention data were collected retrospectively from electronic medical records. Reintervention rate within a year and secondary patency of the RCF after

intervention within two years were analysed using Kaplan-Meier analysis. Results: A total of 109 RCF with juxta-anastomotic stenosis intervention were included. Surgical revision comprised 32% (35/109) while 68% (74/109) had endovascular repair. Reintervention rates within a year were 12% and 62% in surgical and endovascular groups respectively. The two-year secondary patency rate of the RCF after surgical revision was significantly higher at 75% compared to 44% in the endovascular group with p=0.007. Conclusion: Surgical revision of the juxta-anastomotic stenosis yields higher secondary patency and requires less reintervention than endovascular repair.

2:08 pm
Post transplant ultrasound
Muhammad Rabbani

2:18 pm
Management of vascular complications after kidney transplant
Carl Muthu
This presentation will briefly discuss approaches to manage the common vascular complications that may occur after kidney transplantation. Topics covered include arterial and venous thrombosis, bleeding, leg ischemia and renal artery stenosis. There will be an emphasis on preventative strategies and practical approaches.

2:28 pm
Management of post transplant ureteric complications
Stephen Mark
Ureteric complications post renal transplant occur 5-10% of cases. Prevention, Diagnosis and management will be discussed. Of 377 transplants performed at Christchurch, 26 required intervention for post operative ureteric complications.Open surgery was undertaken and all patients had successful outcomes at relief of obstruction. General principles of repair will be discussed.

2:38 pm
Seldinger PD insertion technique
Jan Swinnen
PD is grossly underused in Renal Replacement Therapy though it is often the best & cheapest option in ESRF. There are many reasons for this, including issues with placement of the PD catheter. There are 4 PD catheter insertion techniques: 1. Open surgery 2. Laparoscopic surgery (the commonest) 3. “Peritoneoscopic” techniques (becoming obsolete) 4. Seldinger technique – the future. The Seldinger technique has many advantages but is not standardised & often poorly done. We describe a Modified Seldinger PD Insertion technique developed and introduced at our institution. It is very safe, can be done in the sickest patient, on the fully anticoagulated, under Local Anasthetic, thru a single 5mm incision. It allows immediate PD catheter use for full volume, Samed Day & Urgent Start PD, without peritoneal leak. The technique places the catheter in the Pouch of Douglas & keeps it there. This should become the default option for PD insertion. Technique: * Under LA, +/- sedation; * With US & fluoroscopic guidance * Pre-op mapping with US * Seldinger access 22g spinal needle & microwire * Peritoneography at multiple stages * Low peritoneal entry with gently angled track * Catheter insertion thru 16F sheath * Reverse exit tunnel Results: * To date we have performed >150 procedures, often in the sickest patients, without major complications, significant bleeding or gut injury. * Technical Success Rate 97% * Same Day full volume PD 17%; Urgent Start PD 37% * Significant leak, catheter migration both < 2% Published: Swinnen JJ, Baker L, Burgess D, et al. Changing the peritoneal dialysis access algorithm with a precise technique of percutaneous Seldinger PD catheter placement. J Vasc Access. Published online February 14, 2022. doi: 10.1177/11297298221077607

2:53 pm
Novel perfusion and preservation techniques
Gabriel Oniscu

3:08 pm
How to change dialysis management at your institution
Jan Swinnen
Dialysis for ESRF is very expensive, complex and covers multiple disciplines. Medicine, esp. surgery, is resistant to change, patient safety being a major concern. Hence, changing Dialysis Management is difficult, slow and beset by opposition. Over the last 20 years, we have changed the Dialysis Managemet at our institution profoundly: * Abandonment of Fistula Grafts * Management of most Fistula problems with Endovascular Technics as OPLA Procedures * US the principle diagnostic tool * US at all levels of Dialysis Care by all team members * Expansion of home HD to ~50% of our Dialysis population * Improvement of

Dialysis Systems * Minimisation of Vascath use, elimination of L sided Vascaths * Development of Seldinger PD Access & Urgent Start PD. * Development of “one-stop shop” Dialysis Access Clinics. How to drive change: 1. Change can be driven “top down” or “bottom up”(“Jesuit Planning”) 2. A careful, step-wise approach, introducing new technics, technologies & practices from single patients to Established Unit Practice. 3. Test out a new technology/idea/application in a clinical setting with support from clinical stakeholders & the patient on a small number of cases! 4. If successful, Team Meeting with all stakeholders in the Dialysis Team to: a. Discuss pros & cons & practicalities of the innovation b. Set up a small, well defined Pilot Project with emphasis on safety! 5. If successful, the innovation can be introduced on a limited scale with: a. Emphasis on clinical effectiveness, cost effectiveness & safety b. Real time clinical audit c. Frequent review & discussion with Team 6. If successful, the innovation should then be discussed with management, properly staffed & funded & be driven to new default unit policy.

2:00 pm - 3:30 pm
TRAUMA UPDATE - UPPER / LOWER LIMB

Scientific Session - Orthopaedic Surgery - Conway 2

2:00 pm
Management of posterior sternocalvicular joint injuries
Helen Ingoe

2:10 pm
A novel approach to calvicle malunion surgery
Jay Jefferies

2:20 pm
Proximal humeral fractures - nailing vs. plating
Richard Lloyd

2:30 pm
The Christchurch experience of distal biceps repair
Yinzhou Guo

2:40 pm
Questions

2:45 pm
Short intramedullary nails in pertrichanteric neck of femur fractures
Alex Lee

2:57 pm
Frames in trauma
Andrew Powell

3:09 pm
What’s new in foot and ankle trauma
Brad Stone

---

08 May 2024

4:00 pm - 5:30 pm
BURNS RECONSTRUCTION - CHALLENGES AND TECHNIQUES

Scientific Session - Plastic & Reconstructive Surgery, Hand Surgery, Burn Surgery - Conway 4

A burn injury results in both life-long and life-changing challenges for the reconstrucitve surgeon. Experts

in the field will cover specific areas and specific techniques to deal with these challenges, in both well-resourced and more challenging environments.

4:00 pm
Challenges in hand burn reconstruction
Peter Dziewulski
Burn injury to the hand remains a reconstructive challenge. This talk will focus on optimising functional and aesthetic outcomes in the burned hand.

4:20 pm
Thin free flaps
Andrew Hart

4:35 pm
CSAP flap
Andrew Hart

4:50 pm
Opportunities and challenges of burn reconstruction in an Austere situation: Bangladesh experience
Most Nurunnahar Begum
Burn is so devastating. As a densely populated country like ours, incidence of burn is increasing. Initially flame burn and scald was common but now, incidence of high voltage electric burn increases drastically. In burn, initially we fight for life, then soft tissue coverage and finally rehabilitation and back to life. Reconstruction is always challenging specially in high voltage electric burn injury. Multiple operations, prolonged hospital stay, loss of tendon and nerve and even loss of the limb make their life miserable. Very often patients come back with non functioning limb which demands tendon and nerve reconstruction, splinting and physiotherapy to make the limb functioning and rehabilitate to near normal life.

5:10 pm
Challenges of burn reconstruction on an island paradise - Tonga
Alamea Fulivai

4:00 pm - 5:30 pm
DISEASE

Scientific Session - Surgical History - Bealey 5

4:00 pm
The History of the Black Death
Terence Doyle
The Black Death was a bubonic plague, which killed at least 40% of Europe's population between 1346 and 1353. It recurred sporadically, with another major outbreak in London in 1665. What was its nature and consequences?

4:20 pm
Malcolm Watson and the conquest of malaria in Malaysia
Keanghee Lim
Malaria was rife in the Malay peninsula and islands of the archipelago from time immemorial. It kills its victims quickly and often. In 1829, forty years after Penang Island was first occupied, one-third of all deaths were attributed to malaria. Plans for the cultivation of rubber almost failed because of malaria. When you cleared the land to set up a plantation the workers died in droves. That was the problem that faced Dr Malcolm Watson when he started work in his 'clinic' in Klang as District Surgeon fresh from the London School of Tropical Medicine in 1901. Malcolm Watson had this to say in his diary. He wrote "It occurred to me that ward after ward might be built to accommodate the increasing number of patients without any very substantial advantage to the community... It was clear to me that, even at the risk of being accused of neglecting my patients and 'wasting my time on research' it was my duty to spend some of my time in studying the disease outside of the wards and to make some attempt to prevent people from getting the disease." He conducted an experiment. Klang at that time was surrounded by a large swamp and for the previous five years it had been swept by malaria with a recorded death rate of 160 per 1,000. Malcolm

Watson obtained $30,000 for the Sanitary Board to drain the swamps and the results were spectacular.

4:30 pm
Hirudotherapy Through the Ages: A Journey into the History of Medicinal Leech Therapy
Lachlan Stephens
Leech therapy in medicine traces its historical roots and evolution back to the ancient Greeks and Egyptians, who employed leeches for bloodletting. This was followed in medieval Europe whereby leeches gained popularity in treating various ailments from headaches to fevers. The Renaissance witnessed a surge in leech use, with the advent of medical literature documenting their application in diverse medical contexts. The 19th century medicinal leech's role in bloodletting reaches its zenith, followed by a decline in the early 20th century with the advent of modern medicine. However, a resurgence occurs in the latter half of the century, fuelled by advancements in microsurgery and the discovery of hirudin, an anticoagulant in leech saliva which remains a pivotal part of many reconstructive surgery departments for the salvage of venously congested tissues. The rich tapestry of medicinal leech therapy, tracing its historical roots and evolution as a therapeutic modality, the captivating narrative of leeches in medicine, from ancient civilizations to contemporary applications will be further discussed.

4:40 pm
A timeline of the history of the stoma: From fatal fistula to life-changing procedure
Lydia Maclaurin
The ancient physicians considered penetrating trauma with bowel perforation a fatal injury. Some would demarcate the wound and allow the formation of a natural fistula, but typically the patient did not survive. Direct suturing of intestinal defects was first reported by Brunschwygk and Paré during battlefield surgery in the 1500s. Around this time Paracelsus suggested the creation of an artificial anus for the treatment of penetrating abdominal wounds, however there is little evidence this was utilised. It was not until 1701 that Méry successfully treated an incarcerated hernia with a pelvic colostomy. By the 1750s, exteriorization of the bowel in the event of complete transection was recommended by Heister; while others chose to bring the lacerated bowel to the abdominal wall allowing peritoneal adhesions to close the defect. In 1793 Duret formed a colostomy in a neonate with proctatresia that functioned for 45 years. In the 1800s stoma nomenclature was developed, ileostomies were implicated in malnutrition and by 1840 techniques of stoma formation for bowel obstruction were being taught in medical schools. In 1921 Hartmann described his now ubiquitous technique of left inguinal colostomy. Throughout the 20th century stoma treatments, including reversal techniques, rapidly progressed, filling a vital role in cancer management and treatment of inflammatory bowel diseases. Over the last 50 years, stoma therapy and equipment have advanced considerably and stoma formation now improves quality of life for thousands of patients each year. 1] Garmanova et al (2019), History of surgery: the evolution of views on the formation of intestinal stoma. Hist. Med. 2] Hardy (1989), Evolution of the stoma. ANZ J. Surg

4:50 pm
Auto-appendicectomy: A historical case series
Jane Theodore
Auto-appendicectomy is defined as an operation on oneself to remove the appendix. First attempted under spinal anaesthesia in 1912 by American surgeon, Bertram F. Alden, who after commencing his appendicectomy had his assistant continue amid their threats to leave. There are three published cases of completed auto-appendicectomy, the first in 1921 for uncomplicated acute appendicitis was performed by Evan O'Neill Kane, an American surgeon, under local anaesthesia supported by trained surgical assistants. Kane's objective was to demonstrate the safety of appendicectomy under local anaesthesia due to complications associated with general anaesthesia. The least renowned auto-appendicectomy occurred in 1944 when Australian Army Captain Robert Kerr "Jock" McLaren, a veterinarian, performed his own appendicectomy without anaesthetic. At the time McLaren was involved in guerrilla warfare against the Japanese in the Philippines. McLaren threatened a local medical student with a pistol, forcing him to assist. Visualising the operative field with a mirror, he used a razor blade and dessert spoons to create a muscle-splitting incision to access his abdominal cavity extracting a perforated appendix. A better known case in 1961, involved Leonid Ivanovich Rogozov, a Russian surgeon, who performed an appendicectomy on himself under local anaesthesia having developed acute appendicitis while stationed in Antarctica. He organised several untrained assistants, artificial ventilation and medications including antibiotics. Unlike McLaren, both Kane and Rogozov were experienced surgeons with access to anaesthetic and sterilised surgical instruments. All three survived to tell their tales of do-it-yourself appendicectomy.

5:00 pm
William Crowther – The Surgeon, the Skull and the Statue
Rory Middleton

William Lodewyk Crowther was a prominent surgeon in Tasmania in the mid 19th century, but is best known for the unsanctioned decapitation for ‘medical research’ of the body of William Lanne, the last known male Tasmanian aborigine, in 1869. This caused a furore at the time, and the suspension of his medical registration. Despite the scandal, William Crowther subsequently became premier of Tasmania in 1878. He died in 1885, and a statue was erected to honour him in Hobart’s Franklin Square in 1889. In recent years there has been a surge in critical evaluation of our ancestors, particularly in relation to involvement with slavery or racial exploitation, with this movement resulting in the removal of a number of statues in different parts of the world, which were erected to celebrate the lives of prominent figures. In 2022, the Hobart City Council voted to have Crowther’s statue removed from public display, however there has been significant difference of opinion within the Tasmanian community regarding the planned removal, and as yet nothing has happened. This paper reviews the original circumstances resulting in the current controversy. No-one knows for certain what happened to the various parts of William Lanne’s body, but there are many elements of the story that cast a fairly negative light on the otherwise positive career of one of the pioneer surgeons of Tasmania

5:10 pm
Why a Surgical Pioneer Faded into Obscurity: Unraveling the Fox vs. Moore Medical Dispute (1906-1911)
Justin Yousef
Background: In June 1906, E. L. Palmer sought medical care at Melbourne's Grand Hotel, initially under Dr. William Fox. Dr. William Moore, a surgeon, became involved when Palmer's condition worsened, sparking a dispute between the physicians. The Victorian Branch of the British Medical Association investigated, focusing on Dr. Moore's visit to the patient based on a friend's request. Dr. Fox accused Dr. Moore of attempting to supplant him and steer the patient to his hospital. Results: The Victorian Branch Council found that Dr. Moore, aware of Dr. Fox's care, visited without the patient's request. They concluded that, despite not being a "friendly visit," it was justified under special circumstances and did not aim to supplant Dr. Fox. Criticism arose for Dr. Moore's lack of professional courtesy in informing Dr. Fox. Dr Fox appealed to the Central Ethics Committee, leading to the reversal of the local decision and a debate on colonial branch autonomy. The Victorian Branch Council protested, claiming a breach of instructions. Despite prolonged proceedings, the local decision stood. Conclusions: Dr. Moore's 1909 resignation from the British Medical Association and subsequent rejoining underscored the lasting impact on his professional reputation, highlighting the intricate ethical challenges and appeals within the medical community. Ref: Rank, B. K. (1975). Jerry Moore and some of his contemporaries. Melbourne, Hawthorn Press.

5:20 pm
Diagnosing the canvas: medical observations in classical artwork in a digital age
Oliver Hovav
The era of digitisation is dominated by our reliance on visual representation. This has extended into health with the introduction of telemedicine. In response, clinicians are compelled to enhance their skills in remote observational medicine. However, the historical intersection of medicine and art reveals a rich tapestry of observation and representation. From Leonardo Da Vinci's sketches of the 'Vitruvian Man' to Albrecht Durer's 'Praying Hands,' anatomy students have often turned to art to deepen their understanding. Some disease, like Dürer's 15th-century engravings of Syphilis, are the obvious subject matter, serving as visual references for medical conditions. Yet, amidst celebrated artry, subtle medical nuances within hidden brushstrokes have often gone unnoticed until centuries later. Artistic renderings often knowingly capture objective signs of diseases that were once unfamiliar but are now recognizable to modern medical doctors. This presentation delves into the medical undercurrents of four renowned artworks: Rembrandt's 'Self Portrait,' Joseph Wright's 'An Experiment on a Bird in an Air Pump,' Michelangelo's 'Creation of Adam,' and Leonardo Da Vinci's 'Mona Lisa.' By examining these pieces through a medical lens, the focus is on highlighting signs indicative of diseases often unfamiliar in the eras of their creation. Additionally, the presentation aims to contextualize the sociocultural messages embedded in these artworks, unravelling layers of meaning that intertwine the worlds of art and medicine throughout history. As we accelerate deeper into the digital age, clinicians can examine the historical intersection between art and medicine to determine what visual cues constitutes sufficient information for a clinical diagnosis.

4:00 pm - 5:30 pm
IBD

Scientific Session - Colorectal Surgery - Auditorium 4

4:00 pm
The contemporary management of perianal CD
Tim Eglinton
Perianal fistulas affect at least one third of Crohn's disease patients during their disease course. Despite advances in medical and surgical treatments, they remain a debilitating complication of Crohn's disease and a significant management challenge. This presentation reviews the current medical and surgical options for management and their delivery in a multidisciplinary, patient centred model.

4:12 pm
It takes two to tango: medical approaches and timing of surgery
Amy Lightner

4:24 pm
Centralisation of Pouch Surgery in Australasia
Kheng-Seong Ng, Kheng-Seong Ng

4:36 pm
Segmental resection for IBD
Corina Behrenbruch

4:48 pm
Should we all do the Kono-S anastomosis
David A Clark
Since the publication of the SuPREMe-CD [1] randomised controlled study comparing the Kono S anastomosis with the stapled side to side anastomosis, after ileocolic resection for Crohn's disease, many surgeons will have considered that there is sufficient evidence to implement this new technique into their practice. It is important to recognise that this study used the Rutgeerts score as a surrogate for clinical and surgical outcomes and updated data is now available and was presented at ECCO. Additionally, the interim results of the New York multicentre RCT, powered with a much greater sample size, raise questions regarding even these surrogate outcomes. Furthermore the SPICY trial [2] evaluating the extent of mesenteric resection has concluded and these early results are interesting. Crohn's disease patients are a heterogenous cohort and randomised studies are paramount to evaluate new surgical techniques in a scientific and methodical fashion. [3] References 1.Luglio, G., et al., Surgical Prevention of Anastomotic Recurrence by Excluding Mesentery in Crohn's Disease: The SuPREMe-CD Study - A Randomized Clinical Trial. Ann Surg, 2020. 272(2): p. 210-217. 2.van der Does de Willebois, E.M.L., Mesenteric SParIng versus extensive mesentereCtomY in primary ileocolic resection for ileocaecal Crohn's disease (SPICY): study protocol for randomized controlled trial. BJS Open, 2022. 6(1). 3.Clark, D.A., et al., Time for an Australian and New Zealand randomized controlled trial to study the modified Kono S anastomosis. ANZ J Surg, 2022. 92(12): p. 3132-3134.

5:00 pm
Role of Diet and Microbiome in Post-surgical Outcomes: Can dietary modulation improve surgical outcomes or reduce postoperative recurrence in IBD?
Catherine Wall
Malnutrition and high inflammatory burden are common prior to elective Crohn's disease surgery and are independent predictors of surgical outcomes. Emerging evidence suggests that specific dietary patterns may influence postoperative Crohn's disease recurrence. This talk will cover how modulation of dietary intake can improve nutritional status, reduce intestinal inflammation, improve surgical outcomes and may delay recurrence of Crohn's disease.

5:12 pm
Case Study

4:00 pm - 5:30 pm
MANAGEMENT OF B3 LESIONS

Scientific Session - Breast Surgery - Dobson 1

4:00 pm

Pathology of B3 lesions
Brooke Beardsley

4:20 pm
Radiological management of B3 lesions
Gemma Sutherland

4:40 pm
UK overview of B3 lesion management
Ashu Gandhi

5:00 pm
Discussion

4:00 pm - 5:30 pm
MANAGEMENT OF UPPER GI AND BARIATRIC COMPLICATIONS

Scientific Session - Upper GI Surgery, Bariatric Surgery, General Surgery - Conway 1

4:00 pm
Management of leaks after Bariatric and Upper GI surgery
Michael Talbot
After 20 years of evolving methods in managing Foregut leaks a couple of lessons have been learned. Unfortunately, the published literature provides no coherent guide as to how to approach these patients. While there is clear agreement that the clinical course of these leaks is frequently not benign, translating this knowledge into management algorithms is difficult because many surgeons have only sporadic exposure to these patients and reluctance to make early contact with high volume clinicians is prevalent. Treatment algorithms also vary between institutions depending less on patient factors than clinician preference. Despite these problems, Laparoscopic Sleeve Gastrectomy (LSG) leaks are a useful “model” for the study of the management of foregut leaks. These leaks can be classified in a way that allows clinicians to select treatments that treat the drivers of the leak as well as the associated sepsis. Therapy that fails to acknowledge the presence of a high-pressure lumen and/or a large unstable extra-luminal cavity will fail. Endoscopic, radiologic and surgical therapies are not binary choices and should be used synchronously. Failed therapy is a common occurrence and practitioners managing these patients should consult early with experienced clinician’s. Finally, surgery has the potential to both rescue or doom a patient who presents with a foregut leak. Surgical therapies beyond “lavage and drain” will sometimes be preferable however they are escalatory and can potentially create new problems without effectively treating the underlying condition. This presentation will discuss an “endoscopy first” approach to diagnosis and management of foregut leaks.

4:20 pm
Management of oesophageal perforations
Conrad Stranz
The majority of oesophageal perforations are iatrogenic. Even if recognised, oesophageal injuries can result in significant morbidity and mortality. Modern management includes excellent clinical care that is multifaceted. Invasive techniques include endoscopic, radiological, minimally invasive surgical techniques, and open surgical techniques. This presentation attempts to summarise different oesophageal injuries and management of them.

4:40 pm
Management of internal hernia, strictures and vitamin deficiencies after bariatric surgery
Rowan French

5:00 pm
Management of complex perforated ulcers
Jacob Chisholm

5:20 pm
Discussion

4:00 pm - 5:30 pm
PARATHYROID

Scientific Session - Otolaryngology Head & Neck Surgery, Endocrine Surgery - Dobson 2

4:00 pm
Reoperative parathyroid surgery - challenges and solutions
Tracy Wang

4:20 pm
Parathyoidectomy in the renal transplant patient
John Chaplin

4:40 pm
Ectopic parathyroid glands
Frédéric Triponez

5:00 pm
Challenging Cases
Wendy Liu

5:10 pm
Challenging cases - panel discussion

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Paediatric Surgery - Bealey 4

4:00 pm
Leaky Valves; Boys with bladder dysfunction - consider posterior urethral valves
Benjamin Wagstaff

4:05 pm
The current pattern of paediatric burn injuries in an Australian major burns center
Sophie Mok
Purpose: Burns are a common mechanism of paediatric injury worldwide and are a notable cause of disability-adjusted life-years. Burns in children represent a unique challenge, due to the differences from adults in physical characteristics, physiology and psychology. Methodology: This retrospective cohort study examined trends of paediatric burns in New South Wales, Australia from 2010-22. It specifically focused on the changes in patterns of burn aetiology and patient characteristics, body area affected, total body surface area, first aid, location and management. This study also compared a 'Pre-COVID-19' and 'Peri-COVID-19' era to also analyse the impact of COVID-19 on the pattern of paediatric burns, as children are at higher risk of injury during times of social disruption. Results: Burns in children continue to be concentrated in the toddler and preschooler age group and the main mechanisms of injury remain as scald and contact burns. In recent years, there has been a rising trend of friction burns, alongside a fall in flame burns and severe burns. Management of paediatric burns has also evolved, with predominant use of ambulatory care and low rates of admission and operative intervention. Conclusion: Trends in burn injury continue to evolve with time and over the last decade in NSW, we have observed key changes in the pattern of paediatric burns, with evolving mechanisms of injury, reduced severity of burns and a shift towards ambulatory care.

4:10 pm
Does Successful Distal Chyme Refeeding Eliminate the Need for Distal Contrast Studies in Neonates Prior to Reanastomosis?
Georges Tinawi
Introduction: The confirmation of distal bowel patency, prior to reanastomosis in neonates, is a critical pre-

operative consideration. Distal contrast study (DCS) are often performed prior to surgery to identify strictures. Chyme refeeding via the distal stoma is also often performed in these patients. We aimed to assess the role of DCS in a cohort of neonates who underwent successful chyme refeeding, and determine whether the contrast study changed management. Methods: Retrospective review of all neonates who underwent distal chyme refeeding at our institution, from 2017 to 2022. Clinical, radiological and surgical outcomes were analysed. Results: 15 neonates underwent a period of successful distal chyme refeeding, prior to stoma reversal during the study period. Chyme refeeding was predominantly performed via a feeding catheter placed into the distal stoma, at least once daily. Total number of refeeding days ranged from 9 – 54 days. 10 neonates (67%) had a DCS prior to reanastomosis. Three studies were performed prior to initiating refeeding, and seven were performed during the period of refeeding. Two neonates, with prior NEC, had a DCS suggesting possible distal bowel luminal stenosis, however in both cases, the bowel was demonstrated to be fully patent intra-operatively at the time of reanastomosis. Five children (33%) did not have a DCS prior to reanastomosis, and no adverse outcomes were observed. Conclusion: Our findings suggest that for neonates who achieve a period of successful distal refeeding prior to reanastomosis, a DCS does not appear to add further clinical information, and hence may not be routinely required.

4:15 pm
Antenatal Ruptured Giant Omphalocele: Systematic Review and Case Presentation
Georges Tinawi
Introduction: Antenatally ruptured giant omphaloceles (RGO) represent a rare and highly complex pathology. The literature is sparse on the optimal management of these neonates. We present our experience of a neonate with a RGO and review the literature regarding the topic. Case: A male neonate was born at 34 weeks, weighing 2.3kg, with a RGO. Extracoelomic contents included the entire small and large bowel, stomach and the liver. A biologic mesh (Myriad Ultra) was placed on day 17 as a fascial bridge, and a negative pressure dressing (NPD) was applied using Mepitel, Acticoat and Kerlix as an interface. The NPD was changed every 72 hours in the NICU, with gradual granulation of the mesh. Our patient died at 10 weeks of age due to respiratory failure secondary to severe pulmonary hypertension. Systematic Review: A systematic review was performed according to PRISMA guidelines. Six articles describing the management of RGO in 9 neonates were reviewed. Five neonates were managed with synthetic mesh bridges, with a wide variety of reconstructive techniques subsequently utilised. These included serial mesh plication and excision, delayed skin grafting, component separation surgery, and escharization of the residual native sac. Four neonates were managed with the placement of a bioprosthetic mesh and negative pressure wound therapy. Outcomes were highly variable, and morbidity was high in patients managed with synthetic meshes. Conclusion: The management of neonates with RGO is incredibly complex. We suggest that the optimal strategy for these patients is the early placement of a bioprosthetic mesh in combination with negative pressure wound therapy.

4:20 pm
Congenital diaphragmatic hernia management in a provincial hospital of Papua New Guinea: A case report of challenges in a non-neonatal intensive care setting.
Ian Umo
Purpose The outcome of babies with congenital diaphragmatic hernia has improved with advances in surgery , anesthesia and neonatal intensive care post operatively. In provincial hospitals of Papua New Guinea, the management of congenital diaphragmatic hernia is made difficult by poor diagnostic services and post-operative care. Case presentation We report the case of a one day old female with congenital diaphragmatic hernia (Bockdalek) that was successfully managed in a resource limited, non-neonatal intensive care setting in Alotau Provincial Hospital of Papua New Guinea. Conclusion Congenital diaphragmatic hernias can be successfully managed in resource limited settings. The degree of pulmonary hypoplasia, timely diagnosis and intervention and good post-operative nursing care contributes to the outcome of patients with congenital diaphragmatic hernia.

4:25 pm
It's The Bracing, Not The Brace: An Outcomes Comparison of Two Braces for the Correction of Pectus Carinatum
Sherif Emil
Purpose Bracing is the preferred treatment for pectus carinatum. However, no studies have compared outcomes of different bracing methods. We tested the hypothesis that the type of brace has no effect on outcomes. Methododology A retrospective study of children who underwent bracing during a 10-year period (2011-2021) at a multidisciplinary chest wall anomaly center was conducted. The characteristics and outcomes of patients treated with a pressure-guided orthotist-adjusted brace (FMF Dynamic Compression System) were compared to those treated with a simpler, less costly, self-adjustable brace (Trulife). Pressure of correction was used to assess severity. A standardized follow-up protocol was used. Patients who were

still in active bracing or had inadequate follow-up were excluded. Results During the study period, 376 patients started bracing, with 241 (93.7% males) having sufficient data to assess outcomes (170 FMF, 71 Trulife). Bracing succeeded in 217 patients (90%). Of 24 patients who failed, the majority (17) were due to non-compliance. There were no significant differences in pressure of correction (FMF 5.27 +/- 1.59 vs. Trulife 4.99 +/- 1.62 psi, p = .219), or any other characteristics between the groups. Bracing success (FMF 89% vs. Trulife 93%, p=.329) and active bracing duration (5.41 +/- 3.52 vs. 5.37 +/- 4.28 months, p=.944) were similar between the two groups. Use of the Trulife brace resulted in a cost savings of CAD$198,800. Conclusion Bracing for pectus carinatum is highly successful. A simple self-adjustable brace resulted in similar success rate and bracing duration, when compared to a pressure-guided orthotist-adjusted brace, and was associated with significant cost savings.

4:30 pm
Paediatric empyema thoracis: impact of the implementation of a management protocol
Helen Buschel
Purpose The management of empyema thoracis in children is controversial. Simple effusions can be managed conservatively or with a drain. Complex, empyema with a thick rind/solid components typically requires video assisted thoracoscopic surgery (VATS). However, for loculated effusions there is debate regarding the use of a chest drain with fibrinolysis (CDF) versus VATS. In 2019 in our centre, a protocol was implemented with a focus on increased, standardised use of CDF. The purpose of this study was to assess outcomes for patients post implementation of this protocol. Methodology Retrospective review of all 53 children admitted to the paediatric intensive care unit (PICU) from January 2019 to September 2023 with a diagnosis of empyema. Results Fifty-three children with a mean age of 4.5 years (range 3 months to 16 years) were admitted to PICU with thoracic empyema. Aboriginal and Torres Strait Islander children were over-represented making up 38% (compared to 9% of the North Queensland population). From 2019 to 2023 there has been a progressive decline in the number of children undergoing VATS. From 2019-2021 n=19/34 and 2022-2023 only n=1/19 underwent operative intervention. This has been associated with a significant increase in the number of children managed with CDF. N=25/27 children were successfully managed with CDF and n=2/27 required subsequent operative management. There was no significant difference in the complication rate in children who underwent VATS versus CDF. Conclusion Implementation of an empyema protocol has been associated with a significant reduction in VATS and subsequent increase in use of CDF. CDF was associated with a high success rate and minimal complications.

4:35 pm
Ureteric fibroepithelial polyps in children: retrospective study and systematic review of a rare urological presentation
Helen Buschel
Purpose Fibroepithelial polyps (FEP) are rare, benign lesions of mesodermal origin. Ureteric FEP are extremely rare, with less than 200 cases reported in children over the past 20 years. The purpose of this study is to present: 1. A retrospective review of ureteric FEP at two centres 2. A systematic literature review of ureteric FEP in children Methodology Retrospective review of seven children with upper tract FEP managed at Townsville University Hospital and Queensland Children's Hospital. Systematic review of all seven original articles reporting three or more cases of upper tract, FEP in children from January 2003 to November 2023. Results Seven children, with a mean age of 10.3 years (range 5.5-14) were managed with ureteric FEP. The majority were male (n=6/7) and left sided (n=5/6). The most common presenting features were pain and haematuria. Three children had a prolonged history of symptoms (range 2-10years). Diagnosis was challenging with numerous imaging studies utilised including: ultrasound, cross sectional imaging, functional studies and operative retrograde pyelogram/ureteroscopy. The majority were managed with laparoscopic pyeloplasty (n=6/7) with one case converted to open. The systematic literature review revealed a total of 134 children. 93% were male and 84% of polyps were left sided. Numerous operative approaches were reported. There was n=1/134 case of urothelial papilloma on histology with the remainder being benign FEP. Conclusion Ureteric FEP are a rare pathology typically seen in males and on the left side. Diagnosis can be challenging. Various management options have been reported depending on surgeon experience, size and location of the polyp.

4:40 pm
Management of congenital diaphragmatic hernias in North Queensland: what has changed over 35 years?
Ruth Clun
Purpose Townsville University Hospital is the only paediatric surgery centre in North Queensland (catchment area of 750, 000 square km). Our centre has a neonatal intensive care, paediatric surgeons, paediatric anaesthetists but does not have ECMO. In 2013, a retrospective study evaluating the survival of neonates with congenital diaphragmatic hernia (CDH) at our centre was published. We have performed this follow up study to assess changes in management, survival and outcomes over the past decade.

Methodology Retrospective study of neonates managed at Townsville University Hospital with CDH. Data compared from two groups: 1987-2010 and 2011-2023. Results A total of 74 neonates with CDH were managed during the period, n=52 from 1987-2010 and n=22 from 2011-2023. The antenatal detection of CDH improved from 54% (n=28/52) to 77% (n=17/22). This was associated with more mothers giving birth in Townsville (n=30/52 versus n=19/22). There was no significant change in birth weight (mean 2949 vs 3136) or gestational age (mean 38 in both groups). Time to surgery post birth has increased over the study period from a median of 36 hours in 1987-2010 to 67 hours in 2010-2023. From 2011-2023, two neonates were transferred to Queensland Children's Hospital for ECMO and four neonates required repeat operation for a recurrence. The survival over the time period initially increased and now is stable: 67% from 1987-2002 (n=35/52), 86% from 2003-2010 (n=13/15) and 86% from 2011-2023 (n=19/22). Conclusion There has been an increase in the antenatal detection of CDH in our population. Significant improvement in mortality was seen from 1987 to 2010, which has now plateaued over the past decade.

4:45 pm
Quality of randomised controlled trials and systematic reviews in paediatric surgery: a cross-sectional meta-research study
Wilson Jiang
Purpose: There are few randomised controlled trials (RCTs) in paediatric surgery, and their risk of bias is unknown. Little is known about the methodological or reporting quality of systematic reviews and meta-analyses in paediatric surgery. Therefore, we conducted a cross-sectional study to determine the risk of bias and reporting quality of RCTs, systematic reviews and meta-analyses in paediatric surgery, and the associations between these outcomes and study characteristics. Methodology: We searched MEDLINE, Embase, Cochrane Library, JBI EBP Database, Centre for Reviews and Dissemination and Web of Science and 2021 indexes of high-impact paediatric surgery journals for all RCTs and systematic reviews in paediatric surgery published in 2021. We assessed the risk of bias and reporting quality of RCTs using the RoB 2 and CONSORT tools respectively, and repeated this process for systematic reviews and meta-analyses using the ROBIS and PRISMA tools. Results: We found 82 RCTs and 289 systematic reviews/meta-analyses published in 2021. More than half of RCTs (56%) and almost all systematic reviews/meta-analyses (96%) were at high risk of bias. Only 1% of RCTs and 1% of systematic reviews/meta-analyses were adequately reported. Less than half of RCTs (49%) and systematic reviews/meta-analyses (27%) had a registered protocol. Surprisingly, 56.1% of systematic reviews/meta-analyses had no risk of bias assessment. Conclusions: Recent paediatric surgery RCTs and systematic reviews show high bias and poor reporting quality. Journals, universities, and research institutions should enhance author training to improve reporting quality and reduce bias. However, biased research may still have clinical value.

4:50 pm
Minimally Invasive Correction of Pectus Carinatum in South Australian Teenagers
Christopher Kirby
We present our single institution experience; 15 cases; age range 14 to 17 years. A pre sprung pectus bar is placed through a sub muscle tunnel and anchored using vertical stabilisers and wire to the ribs bilaterally using a modified Abramson technique. Bar, stabilizers and wires are removed after 24 months. Patient selection: Those with a compressible deformity, for whom a trial of removable bracing supplied by our Orthotics team had proven unsuccessful were offered surgery. Our modifications of the Abramson technique with the aim to reduce the reported incidence of skin adherence, wire breakage and bar migration will be demonstrated. Results: we report no skin adherence, three cases of wire breakage, two cases for whom outcome was impaired by bar migration and one patient who had premature bar removal due to chronic pain. No implant infection has occurred. These complications will be discussed in detail. References: Abramson H, D'Agostino et al. A 5-year experience with a minimally invasive technique for pectus carinatum repair. J Pediatr Surg. 2009;44(1).

4:55 pm
Double pathology of pelvi- ureteric and vesico-ureteric junction obstructions
Phoebe Johnston
Introduction Vesico-Ureteric junction obstruction (VUJO) is rarely associated with Pelvi-Ureteric junction obstruction (PUJO). It is usually diagnosed at surgery for PUJO requiring further interventions. We aim to assess the incidence of combined obstructions, outcomes, length of stay, complications and imaging to improve pre-operative investigations and avert unplanned surgery. Methods We retrospectively analysed patients presenting with PUJO and VUJO over 20 years (2003-2023). The demographics, imaging, length of stay, further surgical interventions, and complications were collected. The data were analysed using simple mathematical formulae as case numbers are insufficient for statistical calculation. Results Out of 26 PUJO cases, 8 had VUJO (30.76%). One was identified pre-operatively, others were recognised intra or post-operatively. The hospital stay of patients with PUJO and VUJO is longer (5.8 days vs 2.3 days), with patients

requiring at least one further operation. They had a higher complication rate of 37.5%. Two patients (25%) showed improvement in renal function on a MAG3 scan post-op, with 37.5% having some ongoing hydronephrosis on ultrasound scan. Revisiting the imaging including serial ultrasound & nuclear medicine scans did not reveal cues to the diagnosis retrospectively. Conclusion The low rates of pre-operative diagnosis of combined obstructions are comparable to the literature. The rates of both obstructions in our study were high at 30.76%, portentous of miscoding of PUJO. Double pathology of PUJO and VUJO should be suspected in patients with non-resolving hydronephrosis post PUJO surgery, if not diagnosed intra-operatively. This study does not support additional investigations for pre-operative planning for PUJO surgery.

5:00 pm
The Australian TWIST - a retrospective cohort study of scrotal explorations and their pre-operative TWIST score
John Kandiah

5:05 pm
Neonatal inguinal herniotomy: a regional experience
Nicole Hawkins
Purpose Neonatal inguinal hernias (IH) are common, with an incidence of 3-5% in term neonates and up to 30% in neonates with a birth weight of <1kg. The risk of incarceration is greater in neonates and typically repair is performed prior to discharge. Historically, regional anaesthesia (spinal/caudal) was performed due to proposed lower rates of apnoeas/airway complications. However, this can result in more technically challenging operations under time pressure. Contralateral repair is controversial. Townsville University Hospital (TUH) serves a neonatal catchment area of >750,000km2. This distance has a significant impact on emergency transfer times and time spent by families away from home while awaiting repair. The purpose of this study is to retrospectively audit neonates undergoing IH repair in our regional centre. Methodology Retrospective review of 154 neonates (post conceptional age <60 weeks) undergoing IH repair at TUH from 2019-2023. Results Aboriginal and Torres Strait Islander neonates were greatly overrepresented (30% versus 9% of the population). Nearly 2/3 lived >150km from TUH (66%). 40% underwent an operation under regional anaesthesia and 60% under general anaesthetic (GA). The rate of airway apnoeas did not differ between the two groups. Bilateral inguinal herniotomy was performed in 96% and the surgical complication rate was low. Conclusion This study and other recently published papers suggest that apnoeas post regional anaesthesia are similar to that post GA. In our population, bilateral inguinal herniotomy has become routine with a low incidence of complications. It was also unexpected to find a significant over-representation of Indigenous neonates, possibly relating to higher rates of prematurity.

5:10 pm
Enema Reduction of Paediatric Intussusception across Aotearoa New Zealand: A Nationwide Survey.
Brodie Elliott
Purpose: Most children with intussusception are successfully managed with radiologic enema reduction. Our recent nationwide study revealed significant interhospital variation in the rates of enema reduction success and recurrence. We hypothesise this could be due to differences in management. Therefore we sought to investigate radiologic enema management patterns across Aotearoa New Zealand (AoNZ). Methodology: We performed a snapshot survey of all radiologists who manage paediatric intussusception. Survey answers were collected anonymously via REDCap between 01 Apr 2023 - 01 Jul 2023. Network sampling was used to attain saturation. Results: In total, 24 of the 26 radiologists who regularly manage paediatric intussusception responded. An institutional management guideline was reported in 88% of cases. Pneumatic reduction via Foley catheter under fluoroscopic guidance was used preferentially in 23 cases (96%). A range of catheter retention strategies and hardware were documented. There was significant variation in reported initial and peak reduction pressures, from 0-120mmHg and 100-130mmHg, respectively. If partially successful, another attempt was repeated after 0-5 minutes with a maximum of 3-8 attempts in one sitting. Reduction was most commonly confirmed through small bowel insufflation (92%), but seven clinicians utilised postreduction ultrasound (29%). Conclusion: Almost all AoNZ centres relied on pneumatic reduction under fluoroscopic guidance. Hydrostatic reduction and ultrasound were rarely utilised. Beyond this, pressure limits, reduction attempt timing and periprocedural care appeared to vary significantly. These data lend support for a multidisciplinary standardised, national approach to this common disease.

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Indigenous Health - Dobson 3

4:00 pm
E kore hoki it te waewae tutuki, a, apa ano hei te upoko pakaru - a systematic review of neurosurgical disease for Maori.
Maiea Mauriohooho, Maiea Mauriohooho

4:10 pm
Taniwha: Perpetuating Māori Health Inequities in Cardiothoracic Surgery
Jamie-Lee Rahiri

4:20 pm
Gutsy Moves: Shaping Bowel Health Equity in Te Tai Rawhiti
Noah Appleby

4:30 pm
Ethnic disparity in prostate cancer assessment and management between Māori and non-Māori in Aotearoa New Zealand
Eng Ann Toh
Prostate cancer (PCa) incidence is similar between Māori and non-Māori in New Zealand (NZ) but PCa survival is significantly lower among Māori. This study sought to identify the possible causes for inequitable PCa outcomes among Māori by examining any differences in the assessment, management, and treatment outcomes of Māori and non-Māori with PCa in NZ. 13983 men (1155 Māori and 12828 non-Māori) with PCa diagnosed between 1 January 2016 and 30 June 2022 were recruited from the New Zealand Prostate Cancer Outcome Registry, a national registry for collating PCa care and outcomes data. Socioeconomic data were gathered from a Ministry of Health database via data linkage. Multivariate regression analyses were performed to assess between-group differences in PCa care and outcomes controlling for confounders. At disease presentation, Māori were more likely to receive transrectal ultrasound guided prostate biopsy but less likely to receive transperineal prostate biopsy and pre-biopsy MRI scan compared to non-Māori. For PCa management, Māori were more likely to receive active surveillance and watchful waiting, radiotherapy, and hormonal therapy and less likely to receive surgery than non-Māori. Ethnic disparity in PCa assessment and management between Māori and non-Māori persisted after adjusting for confounders ($p<0.001$ to 0.04). Despite Māori reporting lower scores on patient-reported outcome measures than non-Māori at baseline, both groups showed a similar decline in scores 12 months post-treatment. Ethnic disparities in PCa care pathways could be an important factor in differences in PCa survival between Māori and non-Māori in NZ. Further studies are warranted to examine factors that may contribute to these differences.

4:40 pm
The Murrumba committee and the importance of co-design in implementing Aboriginal and Torres Strait Islander health equity initiatives.
Justin Hunt

4:55 pm
Inequities in ‘complication rescue’ and postoperative mortality for Māori following gastrointestinal cancer surgery in Aotearoa New Zealand
Cameron Wells
Background Consistent evidence has demonstrated stark inequities in postoperative mortality for indigenous Māori patients in Aotearoa New Zealand. This may be contributed to by higher rates of complications, or higher rates of ‘failure to rescue’ (FTR) from complications. Methods All patients undergoing gastrointestinal or hepatopancreatobiliary cancer resection in Aotearoa from 2005-2020 were identified. FTR was defined as the mortality rate for patients with any of 19 complications. Age-standardised and risk-adjusted rates of 90-day mortality, complications, and FTR were calculated. Temporal trends in risk-adjusted outcomes for Māori and Pakeha were compared. Results In total, 31,185 patients with available ethnicity data were included. Māori (8%) and Pacifica (3%) were under-represented compared to the Aotearoa population. Māori had higher age-standardised mortality (5.9%) and FTR (10.8%) compared to Pakeha (mortality 3.2%, FTR 7.2%). After adjustment for demographic, oncological, surgical, and hospital factors, Māori had a higher risk of mortality (OR 1.4, 95% CI 1.2-1.8), complications (OR 1.3, 95% CI 1.2-1.5) and FTR (OR 1.3, 95% CI 1.0-1.6). Analysis of changes over time demonstrated a large improvement in risk-adjusted mortality for Pakeha (6.1 to 3.5%), driven by improvements in FTR (7.3 to 4.0%). However, no significant improvement in mortality (6.6 to 5.4%) or FTR (7.8 to 6.4%) over time was observed for Māori. Conclusion Inequities in postoperative mortality for Māori are contributed to by higher rates of both

postoperative complications and FTR. Improvements in mortality and FTR for Pakeha have not been experienced by Māori. Urgent action is needed to address these inequities in perioperative care in Aotearoa.

5:05 pm
Less harm: Māori next of kin responses to a questionnaire on the treatment of GB in the elderly
Mairarangi Haimona

5:15 pm
Indigenous research and the PhD
Claudia Paul

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Orthopaedic Surgery - Conway 2

4:00 pm
The Impact of Coronal Plane Alignment of the Knee (CPAK) Classification on Early Functional Outcomes after Primary Total Knee Arthroplasty
Faseeh Zaidi
Background: The primary objective was to determine if changing a patient's preoperative Coronal Plane Alignment of the Knee (CPAK) classification influences early functional outcomes after robotic-assisted total knee arthroplasty (TKA). Methods: This was a retrospective review of patients undergoing primary robotic-assisted TKA. Standardized pre- and postoperative long-leg radiographs were obtained. Two reviewers independently measured lateral distal femoral and medial proximal tibial angles (LDFA and MPTA), and a third blinded reviewer resolved any outliers. Pre- and postoperative CPAK classification was calculated by determining the arithmetic hip-knee-ankle angle and joint line obliquity. Validated functional outcomes were assessed using the Oxford Knee Score (OKS) at preoperative baseline, and 3 months, 6 months and 1 year postoperatively. Results: 201 patients were included in the study. Of these, 28.4% were CPAK 1, 26.4% CPAK 2 and 16.9% CPAK 3 preoperatively, while 32.8% were classified CPAK 5, 29% CPAK 4, and 22% CPAK 2 postoperatively. Postoperatively, 23% of patients remained in the same preoperative CPAK classification, while 68% moved one CPAK score and 9.5% moved two. There were no differences when the change in OKS at each time point were compared between patients that moved 0, 1, or 2 CPAK scores. Improved OKS at 12 weeks was seen among patients with lower changes in their LDFA postoperatively when compared to preoperative OKS (r2=0.05, p=0.23). Conclusions: Coronal alignment can be shifted by one CPAK classification without an impact on early functional outcomes. However, increased changes in femoral component coronal alignment appear to negatively influence early functional outcomes after primary TKA.

4:07 pm
A Randomised Control Trial to Compare Topical Use of Antibiotic Versus Conventional Management of Open Fractures
Dickson Wak
Abstract: Introduction: The evidence is building that adding topical antibiotic to standard systemic antibiotic in management of open fractures is lowering the infection rate and complications, however, there is a scarcity of studies in low resource settings. This study aims to evaluate the effect of topical antibiotic on infection rate in open fractures managed in limited-resource settings. Methods: This is a prospective randomised controlled trial comparing topical antibiotic (aqueous gentamycin) and non-topical antibiotic groups. A total of 200 patients with open long bone fractures were admitted, of which 120 patients gave consent and were randomly allocated into the study groups. Eighty patients were excluded from the study .The primary outcome measures were chronic infection rate while the secondary outcome measures included the length of hospital stay, number of surgical procedures and rate of non-union. Results: The mean time of injury to the time of first debridement was 6 days and the delays were observed in all stages due to poor access to surgical care. We recorded a significant reduction of infection rate in the 2nd (p = 0.015) and 6th (p = 0.045) weeks, but non-significant reduction at 6th month (p = 0.3) in the topical group compared to the non-topical group. As compared to the non-topical group, for the topical group we recorded a reduced number of procedures (p = 0.004), reduced length of hospital stay (p = 0.006), the rate of non-unions at 6-month follow-up (p = 0.01). Conclusion: This study shows that the use of local aqueous gentamycin administration as an adjunct to conventional management of open fractures is effective in lowering the infection rates, reducing the number of operations, reducing length of hospital stay and non-

union rates.

4:14 pm
Plate Osteosynthesis of Proximal Humerus Fracture is Associated with Significant Complications and Poor Functional Score for Patients Older than 45 Years Old
Seyed Peyman Mirghaderi
Purpose: This study aimed to identify risk factors for complications and failure following plate osteosynthesis for PHF and discuss a cut-off age that surgeons should consider the high rate of complications. Methodology: Adults with PHF treated with proximal humerus internal locking system (PHILOS) at our tertiary center were identified. Univariate analysis was used to compare complicated and non-complicated patients. Then, a multivariate regression analysis was conducted to assess the risk factors of complications. Results: Complications were observed in 19 cases (14.1%) among 135 patients, including nonunion (n=5), avascular necrosis (n=1), infection (n=1), intra-articular screw perforation (n=1), arthritic changes (n=5), and superior humeral head migration (n=5). In logistic multinominal regression analysis, only older age (OR=1.09) and Neer IV class (OR= 8.3) were associated with an increased likelihood of complication (P<0.05). The age ROC curve for predicting complication-free cases had an area under the curve (AUC) of 0.829, indicating that age could predict the outcomes of ORIF in PHF (P<0.05). The optimal age cut-off was 44 years, which yielded a sensitivity of 100% and a specificity of 65.7. The age ROC curve for predicting favourable Oxford shoulder score (OSS<10) had an of 0.829, indicating that age could predict the favourable OSS outcomes of ORIF in PHF. The optimal age cut-off was 46 years, yielding a sensitivity of 70.0%, and a specificity of 78.6%. Conclusion: The outcomes of ORIF for PHF in patients older than 45 years are associated with significantly higher complication rates and inferior functional outcomes.

4:21 pm
In-vivo accuracy of a new robotically-assisted system for total knee arthroplasty: a prospective cohort study
Faseeh Zaidi
Aim: The primary objective of this study is to determine the in-vivo accuracy and precision of a novel cut block positioning robotic arm for total knee arthroplasty (TKA). Methods: Seventy-seven patients underwent total knee arthroplasty with various workflows and alignment targets by three arthroplasty-trained surgeons with previous experience using the ROSA® Knee System. Accuracy and precision were determined by measuring the difference between various workflow time points, including the final pre-operative plan, validated resection angle, and post-operative radiographs. The mean difference between the measurements determined accuracy, and the standard deviation represented precision. Results: The accuracy and precision for all angles comparing the final planned resection and validated resection angles was 0.90° ± 0.76°. The proportion within 3° ranged from 97.9% to 100%. The accuracy and precision for all angles comparing the final intra-operative plan and post-operative radiographs was 1.95 ± 1.48°. The proportion of patients within 3° was 93.2%, 95.3%, 96.6%, and 71.4% for the distal femur, proximal tibia, femoral flexion, and tibial slope angles when the final intra-operative plan was compared to post-operative radiographs. No patients had a postoperative complication requiring revision at the final follow-up. Conclusions: This study demonstrates that the ROSA Knee System has accurate and precise coronal plane resections with few outliers. However, the tibial slope demonstrated decreased accuracy and precision were measured on post-operative short-leg lateral radiographs with this platform.

4:28 pm
Dislocation Following Direct Anterior Primary Total Hip Arthroplasty: A Consecutive, Single-Surgeon Cohort
Seyed Peyman Mirghaderi
Purpose: Dislocation is one of the debilitating complications of total hip arthroplasty. It is a common reason for revision surgery after THA, along with other complications such as infection and instability. This study determined the prevalence and risk factors of dislocation after primary total hip arthroplasty using the direct anterior approach. Methodology: Retrospective Data from patients who underwent primary THA from 2014 to 2020 was analyzed. Anteversion and inclination angles were extracted from their imaging studies, and demographic data were also recorded from their medical records. Data were analyzed using SPSS version 26. Results: 1204 cases of THA were reviewed in our study. 31 (2.57%) dislocations happened after a minimum follow-up of five years. Our study showed that DDH diagnosis as the underlying condition, using Wagner Cone and Wagner SL stem, cup size smaller than 52, head size smaller than 34, anteversion and inclination angle outside the Lewinnek safe zone can be risk factors for dislocation. Primary OA and Fitmore stem acted as protective factors for dislocation. Conclusion: In the DA approach, the underlying disease, properties of the prosthesis used such as cup and head size, stem type, and anteversion and inclination angles can be the potential risk factors for dislocation.

4:35 pm
Interventions to Improve Patient Care on Surgical Ward Rounds: A Systematic Review

Reuben He

Background: Ward rounds are an essential component of perioperative care. However, the relative effectiveness of different interventions to improve the quality of surgical ward rounds remains uncertain. The aim of this systematic review was to evaluate the efficacy of ward round interventions among surgical patients. Methods: A systematic literature search of the MEDLINE (OVID), EMBASE (OVID), Scopus, CINAHL, and PsycInfo databases was performed on 7 October 2022 in accordance with PRISMA guidelines. All studies investigating surgical ward round quality improvement strategies with measurable outcomes were included. Data were analysed via narrative synthesis based on commonly reported themes. Results: In total, 28 studies were included, which consisted of cohort studies (n = 25) and randomised controlled trials (n = 3). Checklists were utilised most commonly (n = 22), followed by technological (n = 3), personnel (n = 2), and well-being (n = 1) quality improvement strategies. The majority of checklist interventions (n = 21, 95%) showed significant improvements in documentation compliance, staff understanding, or patient satisfaction. Less frequently reported ward round interventions demonstrated improvements in communication, patient safety, and reductions in patient stress levels. Conclusions: Use of checklists, technology, personnel, and well-being improvement strategies have been associated with improvements in ward round documentation, communication, and staff and patient satisfaction. Future studies should investigate the ease of implementation and long-term durability of these interventions, in addition to their impact on clinically relevant outcomes such as patient morbidity and mortality

4:42 pm

Robotic-assisted total knee arthroplasty is associated with earlier return of symmetrical limb function compared to conventional jig-based techniques using wearable sensors: a prospective cohort study

Faseeh Zaidi

Background: The purpose of this study was to compare outcomes of patients undergoing robotic-assisted total knee arthroplasty (RA-TKA) to conventional instrumentation in the early postoperative period using traditional patient-reported outcome measures (PROMs) and wearable sensors. Methods: This was a prospective, matched, parallel cohort study of 100 patients with symptomatic end-stage knee osteoarthritis undergoing primary TKA (44 RA-TKA and 56 conventional TKA). Functional outcomes were assessed using ankle-worn inertial measurement units (IMU) and PROMs. IMU-based outcomes included impact load, impact asymmetry, maximum knee flexion angle, and bone stimulus. PROMs, including Oxford Knee Score (OKS), EQ-5D, and Forgotten Joint Score, were evaluated at pre-operative baseline, weeks 2 to 6 post-operatively, and at 3-month follow-up. Results: By post-operative week 6, RA-TKA was associated with significant improvements in maximum knee flexion angle compared to conventional TKA (118o ± 6.6o vs 113o ± 5.4o; p=0.04), symmetrical limb loading (82.3% vs 22.4%; p<0.01), cumulative impact load (146.6% vs 37%; p<0.01), and bone stimulus (25.1% vs 13.6%; p<0.01). Of note, RA-TKA demonstrated an earlier return to symmetrical limb loading, with operative limb IMU-based function reaching 80% of the non-operative limb by post-operative week 3. Significantly more RA-TKA patients achieved an 'excellent' outcome at 6 weeks compared to conventional TKA using OKS subscales (47% vs 41%, p=0.013). Conclusion: RA-TKAs were associated with functional improvements when assessed using IMUs compared to conventional TKA, which were not detected by traditional PROMs during the early post-operative period.

4:49 pm

Accuracy of Preoperative Hip Aspiration in Diagnosing Infection Prior to Conversion to Total Hip Arthroplasty is Low

Seyed Peyman Mirghaderi

Purpose: To find how effective is preoperative hip aspiration for detecting infections in patients slated for conversion THA. Methodology: This retrospective study evaluated patients who were scheduled for conversion THA following failed ORIF. All participants underwent preoperative ESR/CRP testing, joint aspiration, and intraoperative cultures, with the latter serving as the diagnostic gold standard. Results: The sensitivity of preoperative hip aspiration was 17.7%, although specificity was high at 81.0%. For CRP, an area under the curve (AUC) of 0.643 was observed, and a cutoff value of 8.8 mg/L exhibited a sensitivity of 64.3% and specificity of 64.7%. ESR did not show promise as a diagnostic tool, with an AUC of 0.577. Conclusions: Preoperative hip aspiration exhibited poor sensitivity, though high specificity, for diagnosing infections in patients undergoing conversion THA. CRP values demonstrated moderate diagnostic potential, while ESR did not show significant promise.

4:56 pm

Patient satisfaction with an integrative multi-disciplinary model of patient care

Meghan Dares

Joint Vision Orthopaedic Group has used an integrated, multidisciplinary clinic (MDC) model for over three years. Integrated health care services have been shown to improve patient care, satisfaction, while also enhancing cost effectiveness. Purpose: Describe the set-up of an orthopaedic foot MDC (surgeon, allied

health, radiology services) all collocated in a large regional specialist centre. Also, discuss the benefits of the model in terms of clinical decision making, patient-centred care and satisfaction. Methodology: Two-year retrospective descriptive analysis of patient demographics, treatment pathways (surgical vs conservative management) and overall patient satisfaction with the MDC model of care. Results: 5221 new patients attended an MDC between Jan 2021 and Dec 2023. The average conversion rate to surgery for two orthopaedic foot specialists was 34.3%. Almost half of these surgical patients trialed conservative treatment or pre-habilitation prior to surgery (49.4%). Approximately one third of patients (29.3%) were able to be treated conservatively, without surgery. Patient feedback regarding the MDC model was consistently positive. Conclusion: A patient centred MDC model of care in a single location allows for improved tailoring of treatment options (surgical and non surgical). This may result in improved patient satisfaction and overall clinical outcomes (both physical and financial).

5:03 pm
Effect of Posterior Pelvic Ring Fixation in Treating Anterior-Posterior Compression Type-II Pelvic Fractures: A Randomized Clinical Trial
Seyed Peyman Mirghaderi

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - General Surgery, Hernia Surgery - Bealey 3

4:00 pm
Standardised Clinical Assessment and Management Plan (SCAMP) for Antibiotic Use in Acute Uncomplicated Sigmoid Diverticulitis: A Prospective Study
Ali Sarfarazi
Background Recent studies have demonstrated acute uncomplicated diverticulitis can be managed without antibiotics. We designed and implemented a standardised clinical assessment and management plan (SCAMP) to align with this evidence. The use of SCAMPs guide adjustments to clinical practice in adherence with evolving research and monitors patient outcomes through prospective data collection. Methods We reviewed the management of uncomplicated diverticulitis at Auckland City Hospital (New Zealand) over a 6-month period. Based on this, and recent evidence, a SCAMP was devised comprising a proforma with inclusion/exclusion criteria for non-antibiotics management of uncomplicated descending/sigmoid diverticulitis. Data including; antibiotic use, reasons for clinician deviation, length of stay (LOS), readmission rates, and complications were recorded between August 2023 and January 2024. Comparison to retrospective data was performed using unpaired t-test. Results Total of 53 patients (29 female, 24 male, median age 59) were admitted with diverticulitis over the study period, 39 (74%) with uncomplicated descending/sigmoid diverticulitis. Of these 20 (51%) were managed without antibiotics. There was >90% clinician adherence to the clinical proforma. The mean LOS was 1.0 day (compared with 2.0 days pre-SCAMP; $p<0.001$). There were no re-admissions or complications at 30 days. Conclusion SCAMP protocols are an emerging quality improvement tool to instigate change in clinical practice. Regular assessment of outcomes and adjustments to protocols allow further improvements. This study describes the initial success instigating evidence-based change in a tertiary centre with significant decrease in LOS without antibiotic use in uncomplicated sigmoid diverticulitis.

4:10 pm
The StapleRR - Making the case for the stapled eTEP retrorectus repair for ventral hernia
Imeshi Indigahawela
The classic eTEP retromuscular ventral hernia repair is now a well-established technique(Belyansky et al SE 2017) However,there are criticisms:It entails extensive dissection,it is a difficult procedure to learn and teach,posterior sheath closure issues often lead to unnecessary TARs,posterior sheath dehiscence is a life-threatening complication,it is an excessively lengthy procedure,ergonomics is a major constraint in laparoscopy,iatrogenic injuries are not uncommon,and may create major complex hernias in place of simpler ones Conventional eTEP approaches are challenging:Linea alba breach may occur during crossover,inadvertent peritoneal breach with pneumoperitoneum,unfamiliar anatomy for the average general surgeon,difficult closure of the layers of the abdominal wall The proposed solution-a standardised approach to eTEP ventral hernia repair,with the inherent aim of making the procedure easier,faster and more reproducible for the aspiring AWR surgeon.We explain the procedure step by step and also the technical Issues and problems Our experience:We have performed 30 cases of stapled eTEP retromuscular

repairs with the longest follow-up being 3 years. Average duration of procedure was 80 minutes. Mean duration of stay was 25 hours. There were two complications: one inadvertent stapling of omentum and one recurrence with chronic PRS disruption (yet to be operated upon) Conclusion:This is an interesting newer approach to AWR in simpler cases. Future studies should be focused on cadavers and high quality RCT's to better inform aspiring AWR surgeons about the potential of this standardised technique.

4:20 pm
Laparoscopic versus open approach for emergency repair of groin hernias: A systematic review and meta-analysis
Simon Lai
Purpose: Despite the historical preference for open repair over laparoscopic repair for acutely strangulated and incarcerated groin hernias, literature investigating the optimal approach is limited. This review explores the safety and clinical outcomes of laparoscopic and open groin hernia repair in the emergency setting. Methodology: PubMed, Embase, Scopus, Cochrane Library, and Web of Science were systematically searched for articles comparing outcomes between laparoscopic and open emergency groin hernia repair in adult patients. Primary outcomes included operative time, length of hospital stay, post-operative complications, recurrence, and reoperation. Secondary outcomes were post-operative mortality and the rate of conversion from laparoscopic to open repair. Results: Thirteen articles with 40,199 patients were included. Laparoscopic repair resulted in shorter length of hospital stay (MD -2.23 days [95% CI -4.17 -0.28], p = 0.0324), reduced risk of wound infection (RR 0.29 [95% CI 0.18, 0.45], p = 0.0003], and lower reoperation rate (RR 0.663 [95% CI 0.46, 0.95], p = 0.0368). No statistically significant differences were observed in operative time (p = 0.2720), seroma formation (p = 0.3142), respiratory complications (p = 0.9880), and recurrence (p = 0.0559). In-hospital mortality ranged from 1.88% to 2.20% for open repair and 0% to 1.41% for laparoscopic repair. Conversion from laparoscopic to open repair occurred in 3.76% of patients ([95% CI 0.29, 34.11]). Conclusion: Emergency laparoscopic repair of groin hernias results in shorter hospital stay and reduced post-operative morbidity, with comparable operative time to open repair. It appears to be a safe and feasible alternative to open repair in the acute setting.

4:30 pm
Laparoscopic Totally Extraperitoneal Repair of Inguinal Hernias in Female Patients: Does older age influence incidental findings and Quality-of-Life?
Sergei Tsakanov
Purpose: To investigate the age-related incidence of incidental perioperative findings and differences in postoperative Quality-of-Life using the Carolinas Comfort Scale (CCS), in female patients undergoing laparoscopic totally extraperitoneal (TEP) inguinal hernia repair. Methodology The clinical data of all female patients who underwent elective TEP repair between September 2009 and December 2023 was retrieved from a prospectively maintained institutional database. The data was divided into two groups (age □50 years vs >50 years old) and analysed retrospectively. Results: There were 143 female patients who underwent TEP repair of 176 inguinal hernias with no conversion to open. Forty-one femoral and 33 obturator hernias were incidentally found in 58 patients (40.6%). Patients aged □50 years had the same frequency of incidental femoral hernias than those >50 years, but there was a trend towards increased incidence of obturator hernias found in older age group (P=0.06). At 2-weeks post-surgery, the average CCS score ratio was 0.14 +/- 0.15 in the younger age group, compared to 0.08 +/- 0.11 in >50 years (P=0.008). When looking at the eight different domains of the CCS score, younger patients (age □50 years) were experiencing significantly more pain when performing activities of daily living (P=0.017), walking, or standing (P=0.05), or taking stairs (P=0.02). Conclusions: TEP inguinal hernia in older female patients increases the chance of finding an associated obturator hernia. At 2-weeks post-surgery younger patients are experiencing more residual groin pain when performing activities of daily living, walking, or standing, or taking stairs.

4:40 pm
Risk for contralateral inguinal hernia repair following primary unilateral repair – a register-based study
Anders Olsson
Purpose To investigate the incidence of, and predictive factors for, a subsequent hernia repair on the contralateral side following a primary unilateral hernia repair. Methodology A prospective study from the Swedish Hernia Register based on 151,297 patients undergoing unilateral inguinal hernia repair using an open or endo-laparoscopic technique, during 2007-2019. Incidence, predictive factors for, and time to, a contralateral hernia repair were analyzed. Results A contralateral hernia repair was performed in 7.4% within 2.7 years (median) after the index operation. The median follow-up time was 7.5 years. Significant predictors were male sex, high age, medial inguinal hernia, combined inguinal hernia, hernia defect size 1.5-3.0 cm and > 3 cm, and a repair on the left side. Endo-laparoscopic repairs and obesity were associated with a lower incidence of subsequent contralateral repair. Conclusion The risk for a following contralateral hernia repair is 7.4%. Pre- and perioperative findings: medial or combined hernia; a large hernia defect size; and a left-sided

hernia, support a proceeded perioperative contralateral exploration and a peri-operative bilateral repair.

4:50 pm
Phasix™ Mesh for Giant Paraoesophageal Hernias – The Future of Hiatus Hernia Repair?
Sarah Mahmood
Purpose: Mesh reinforcement of the oesophageal hiatus decreases recurrence rates for giant paraoesophagal hernias. The use of permanent synthetic mesh is associated with significant risk of erosion which is not observed in absorbable biosynthetic mesh – with the trade off long-term hernia recurrence. We aim to assess the safety and effectiveness of Phasix™ nonST mesh in the repair of giant paraoesophageal hernias. Methodology: Patients presenting to Bankstown hospital in 2020-21 with giant paraoesophageal hernias were included. 7x10cm Phasix™ nonST mesh, fashioned in a standardised configuration was inserted behind the oesophagus, secured with fibrin glue and monofilament sutures. A modified Dor technique was used. Primary endpoint was early endoscopic recurrence and secondary endpoints were length of hospital stay, morbidity, mortality and symptom recurrence. Results: Thirty two patients (mean age 68.1 years) with giant paraoesophageal hernias underwent laparoscopic Phasix™ nonST mesh repair with modified Dor fundoplication in 32 cases. Dyspnoea (63.6%), epigastric/chest pain (48.5%), and dysphagia (51.5%) were the most common symptoms. Reflux was negligible. There were 62.5% type III and 15.6%% type IV hernias. Thirty five (85%) patients had more than 50% herniation of the stomach. Median length of stay was 3 days and 97% were symptom free at 12 and 24 months. There was no major complication and no mortality. There was one endoscopic and radiological recurrence was found in one (3.1%) patient at 24 months. Conclusion: Phasix™ non ST mesh reinforcement of the oesophageal hiatus with fibrin glue fixation shows promise in reducing recurrence rates for repair of giant paraoesophageal hernias.

5:00 pm
Developing a Risk Prediction Tool for Emergency Laparotomy
Ahmed Barazanchi
Purpose Emergency Laparotomy (EL) carries high mortality, necessitating accurate and timely risk prediction for patient care and quality improvement. Current risk prediction tools are developed based on variables collected for audit encompassing physiological and comorbidity markers. The Risk Estimation for Acute Laparotomy (REAL) study aims to develop a preoperative prediction model based on the current understanding of EL risk factors. Method The REAL study is a multicenter prospective cohort study on 5 major NZ hospitals. 234 variables were prospectively collected for each patient in the following categories: acute physiology, comorbidities, frailty, disability, quality of life, nutrition, and socioeconomic factors. The model was developed by sequential logistic regression. The area under the receiver operator characteristic curve (AUROC) was used to assess discrimination, and McFadden's R-square (MFR) was used for calibration. Results 1167 patients were recruited, with an inpatient mortality of 6.6%. The selected variables were the clinical frailty scale, resuscitation status, creatinine, heart failure, obstructive pulmonary disease, liver failure, confusion, diastolic bp, pulse rate and age. For simplicity, only 2 variables were continuous, and the remainder were categorical. The model achieved an AUROC of 0.90, excellent discrimination, and an MFR of 0.32, excellent calibration. Conclusion The REAL study presents a novel risk prediction tool with excellent discrimination and calibration. This model is unique as it is not constrained by variables collected for other purposes. Focusing on a parsimonious selection of variables offers a practical, easily applicable tool for preoperative risk assessment in EL patients.

4:00 pm - 5:30 pm
SHOW ME THE EVIDENCE: UPDATES IN HPB

Scientific Session - HPB Surgery - Conway 3

4:00 pm
Adjuvant chemotherapy in CRC METS
Emily Olive

4:15 pm
Neoadjuvant chemo for resectable pancreas cancer
Bartholomew McKay
Outcomes for pancreatic adenocarcinoma remain dismal despite patients undergoing combinational therapy with surgery and systematic treatment. 5-year outcomes have been recently seen to be improved

with modern surgery and multi-agent chemotherapy, however sequencing these treatments has long been a debate. Standard of care for borderline resectable disease has been established to be neoadjuvant therapy followed by surgery in those who do not progress. For up-front resectable cancer the jury is still out on whether systemic therapy should be given before or after surgery. Both sides of the debate are likely driven by a lack of equipoise in this domain. Proponents of neoadjuvant treatment argue pancreas cancer is a systemic disease and chemotherapy is the patient's most important treatment with an improved chance of receiving their prescribed course prior to morbid surgery, as well as providing an in vivo assessment of tumour biology. Conversely, proceeding with surgery first removes the primary tumour obtaining local control, improving pain and reducing the risk of recurrence of biliary and duodenal obstruction. The issue in this group is not only morbidity of surgery preventing commencement/completion of adjuvant chemotherapy but also early disease relapse putting the patient through unnecessary surgery. In recent years multiple trials have been conducted to answer the question of treatment selection. We will explore the evidence providing an up-to-date review in this space.

4:30 pm
Early or delayed drainage for infected PN inside 4 weeks
Helen Pham
Pancreatic or peri-pancreatic necrosis complicates about 20% of all acute pancreatitis (AP) episodes with infected necrosis associated with a higher mortality rate of 10-30%. Current evidence-based guidelines recommend that infected pancreatic necrosis (IPN) should be managed with a step-up approach. With increasing use of minimally invasive approach, the optimal timing of drainage is still debated. There is widespread agreement that delayed drainage of infected necrosis > 4 weeks is favoured to ensure clinical success and safety. Earlier intervention can be considered in selected patients with ongoing clinical deterioration, and recognition of these patients is essential. Management of these patients require an intensive multidisciplinary approach in a specialised HPB centre.

4:45 pm
How should the incidental CBD stone be managed
Matilda Anderson

5:00 pm
Best approach to a small FLR
Marwan Idrees
In hepatic surgery, managing small Future Liver Remnants (FLRs) is pivotal for successful outcomes. Initially, FLR assessment involves liver function tests (LFTs), including plasma bilirubin, transaminases, and albumin levels. Dynamic tests like Indocyanine Green (ICG) clearance and ^{99m}Tc-Mebrofenin scintigraphy provide in-depth evaluations of liver functional capacity. For augmenting FLR, established techniques like Portal Vein Embolization (PVE) and Portal Vein Ligation (PVL) are utilized to stimulate FLR hypertrophy by redirecting blood flow. The adequacy of FLR is contingent on liver function status; typically, a 20% FLR suffices for those with normal liver function, but this increases for patients with prior chemotherapy exposure, obesity, or cirrhosis. Novel strategies such as Liver Venous Deprivation (LVD) and Associating Liver Partition and Portal Vein Ligation for Staged Hepatectomy (ALPPS) offer enhanced hypertrophy. LVD combines PVE with hepatic vein embolization, while ALPPS accelerates FLR growth through liver partitioning. Additionally, Selective Internal Radiotherapy (SIRT), initially used for hepatocellular carcinoma treatment, is now explored for FLR augmentation. These evolving strategies, personalized based on liver quality and surgical requirements, aim to mitigate postoperative liver failure risks, enhancing patient recovery and long-term health following major liver resections.

4:00 pm - 5:00 pm
SURGICAL EDUCATION RESEARCH SESSION - HOW CAN I MAKE IT BETTER?

Scientific Session - Surgical Education - Dobson 4

4:00 pm
Panel
Andrew MacCormick, Joy Rudland, Tim Wilkinson

4:30 pm
Training engagement and flourishing in Aotearoa New Zealand surgical trainees

4:40 pm
The Surgical Education Checklist
Poppy Redman

4:50 pm
Developing and piloting operative cognitive training
Kristy Mansour

4:00 pm - 5:30 pm
SURGICAL ONCOLOGY FREE PAPERS SESSION

Scientific Session - Surgical Oncology - Conway 5

4:00 pm
Do Less Harm: determining the age when surgical treatment of glioblastoma no longer prolongs quality of life.
Rosanna Rahman
Purpose: Surgical resection of glioblastoma (GB) extends survival; however, at what age does surgery no longer prolong a reasonable quality of life. We examined post-operative functional independence (FI) as a proxy for quality of life in elderly patients. Methodology: Records of patients 60 years and older who underwent surgical intervention for a GB at a single centre between August 2000 and September 2018 were retrospectively reviewed. Duration of FI post-op was determined by the first documented loss of independence with activities of daily living. Pre-op factors associated with mortality were assessed with a multivariate analysis and logistic regression model. A prognostic tool for morbidity and mortality was developed using a jackknife (hold-one-out) method for good out-of-sample performance. Results: In total, 352 patients had a mean age of 69.1±6 years and a median survival of 7.1 months post-operation. Median months of FI was 1.3, improving to 2.7 following sub- or gross-total resections, but was 0 for those who had biopsies. In patients aged 60-64.9 years undergoing surgical resection, 74.2% (49 out of 66 patients) had FI post-op, whereas only 8.3% (1 out of 12 patients) of those 75 years and older having biopsies retained FI. Advancing age (p=0.0005), declining Karnofsky Performance Status score (p=0.007), and the presence of multifocal (p=0.002) and bilateral tumours (0.001) were significantly associated with decreased survival post-op. The prognostic models for morbidity and mortality had areas under the curve of approximately 0.72. Conclusion: Performing biopsies in patients 75 years and older does not allow them to retain or regain FI and instead adds to their physical burden for their remaining days.

4:08 pm
Tailoring intraperitoneal chemotherapy in patients with advanced peritoneal cancer using patient-derived organoids
Harleen Kaur
Peritoneal carcinomatosis from gastrointestinal tumors is a grim prognostic factor, but advancements in cytoreductive surgery, intraperitoneal chemotherapy (HIPEC & PIPAC), and patient-derived organoid culture (PDO) have improved median overall survival by 21-32 months. Patient-derived organoid culture (PDOs) offer a breakthrough in personalized medicine, allowing allowing researchers and clinicians to recapitulate the complexity and heterogeneity of individual tumors in-vitro. Our study aimed to assess the feasibility of using PDO cultures for predicting and guiding targeted drug treatments, advocating for their integration into clinical practice. Tumours samples were collected from patients prior to receiving HIPEC/PIPAC treatments. PDOs were successfully generated from 24 patient samples (n=39) with a 74% culture success rate. Immunohistochemistry and drug panel testing with various drugs (oxaliplatin, mitomycin, gemcitabine, nab-paclitaxel)were completed within 8-10 weeks. Non-linear regression curve fits were used to generate dose response curves in GraphPad Prism with 95% cell viability used to measure resistance. This resulted in a recommendation for treatment change to treating clinicians for three patients undergoing PIPAC as organoid cultures suggested insensitivity to the first-choice PIPAC chemotherapy. In this poor prognosis cohort, PDOs may represent a transformative tool in personalised medicine, enabling precise prediction of drug responses and facilitating tailored treatment strategies.

4:16 pm
The influence of postoperative morbidity on long-term quality of life trajectories following pelvic exenteration

Preet Makker

Purpose Pelvic exenteration offers significant survival benefits for patient with locally advanced rectal cancer however, postoperative morbidity remains high. The aim of this study was to determine the impact of postoperative morbidity on postoperative quality of life (QoL) trajectories following pelvic exenteration. Methods This prospective cohort study included patients who underwent pelvic exenteration between 2008 and 2023 at Royal Prince Alfred Hospital, Sydney. QoL measures were collected at baseline, 6, 12, 18, 24, 36, 48, and 60 months using the short-form 36 (SF-36v2) survey. Postoperative outcomes included length of stay (LOS), ICU stay, postoperative complications and mortality. Mixed-effects analyses were used to determine differences QoL trajectories based on postoperative outcomes. Results This study consisted of 674 patients, with median age of 61 years. Recurrent rectal cancer was the most common indication for surgery (36.1%). 47.2% of patients underwent partial, and 52.8% underwent complete pelvic exenteration. 48.9% of the cohort underwent sacrectomy. Shorter LOS, ICU stay and fewer (or no postoperative complications) were associated with better physical QoL outcomes at all time points. Conversely, postoperative morbidity did not significantly impact mental QoL outcome. Furthermore, there was a longitudinal improvement in mental QoL outcomes, independent of postoperative morbidity. Conclusion Higher morbidity following pelvic exenteration were associated with poorer health related quality of life trajectories. Interventions aimed at mitigating postoperative morbidity may enhance long-term QoL outcomes following pelvic exenteration.

4:24 pm

The state of psychological prehabilitation in randomised trials for patients undergoing cancer surgery

Nicholas Hirst

Purpose Current evidence suggests that poor preoperative mental health impacts surgical outcomes, quality of life and recovery of patients undergoing cancer surgery. Thus, there is a need to explore the effectiveness of psychological prehabilitation on improving surgical outcomes and quality of life for patients undergoing cancer surgery. Methodology This systematic review searched MEDLINE, Embase, Cochrane, CINAHL, AMED and PsycINFO databases. Randomised controlled trials reporting on the effectiveness of preoperative psychological interventions for patients undergoing cancer surgery were included. Primary outcome included postoperative complication and length of hospital stay. Results The initial search identified 111 trials. Of the 111 trials, only 16 (<15%) included psychological prehabilitation. The 16 trials were reported across six different cancer populations, mostly including lung (n = 6) and colorectal (n = 6) cancers. Of the 16 trials, eight (50%) included relaxation techniques, seven (44%) deep breathing, five (31%) psychological education, four (25%) counselling referral, two (12%) personalized coping strategies, one (6%) group cognitive behavioural therapy and one (6%) hypnosis. Most trials (n = 9, 56%) had a prehabilitation duration of greater than 4 weeks, two trials (13%) were 2-4 weeks and five (31%) trials less than 2 weeks. Conclusions The findings of this systematic review convey firstly, the lack of psychological prehabilitation within the literature and secondly, the substantial heterogeneity across trials, strongly suggesting a lack of consensus surrounding intervention type, duration, outcome measures and reporting of adherence of psychological prehabilitation.

4:32 pm

What is the accuracy of radiological peritoneal cancer index in repeat cytoreductive surgery?

Si Louise Sun

PURPOSE: The peritoneal cancer index (PCI), developed by Sugarbaker in 1990 is a validated tool to quantify extent of peritoneal disease in patients with peritoneal carcinomatosis. It is used to select and prognosticate patients undergoing cytoreductive surgery (CRS) with or without HIPEC. Improvements in perioperative morbidity and long-term survival have resulted in some patients who require repeat or iterative CRS to treat recurrent peritoneal disease. A precise evaluation of PCI by diagnostic laparoscopy is often precluded due to extensive adhesions following initial CRS. As such, greater value is placed on radiological investigations such as CT, MRI and FDG-PET. The aim of this study is to evaluate the accuracy of radiological PCI in peritoneal malignancy patients undergoing repeat CRS. METHODS: A retrospective review of all patients who underwent repeat CRS in a peritoneal malignancy unit from January 2022 to December 2023 was performed. Accuracy of radiological PCI, determined via multidisciplinary meeting involving specialist surgeons and radiologists, was compared to surgical PCI, calculated during the CRS procedure. RESULTS A total of 32 patients were included, of which pseudomyxoma peritonei was the most common histopathology (63%). The median time interval between CRS procedures was 21.5 months. FDG-PET had the highest accuracy (67.5%), followed by CT (62.6%) and MRI (50.0%) in assessing PCI. Completeness of cytoreduction did not significantly correlate to accuracy of radiological PCI. CONCLUSION Radiological PCI for patients undergoing repeat CRS is most accurately predicted by FDG-PET and CT, rather than MRI.

4:40 pm

The power of prehabilitation – An overview of the current evidence

Scott Venter

ABSTRACT Purpose Over the last decade, the number of prehabilitation randomised controlled trials (RCTs) increased drastically. This review aims to assess the reporting of sample size calculations in prehabilitation RCTs in cancer surgery patients. Methodology A comprehensive search was performed in multiple medical databases to identify RCTs evaluating the effectiveness of exercise, nutrition, and/or psychological interventions on postoperative outcomes of adult patients undergoing cancer surgery. Outcomes included type 1 error (α), power (1-β), mean (or mean difference between randomisation arms) and variance (e.g., standard deviation (SD)) for continuous outcomes, and event rates or event rate difference between randomisation arms. Using the information described in the published RCTs, an attempt was made to recalculate the sample size required, given a 10% margin of error using PASS 2023. Results Of the 60 included RCTs, 27 (45%) reported sufficient information to complete sample size recalculation. Of those that provided sufficient information, 11 (41%) provided variables that allowed for sample size replications within a 10% range of the reported sample size, whereas nine (33%) were >10% higher than reported sample size (max: 809% higher), and seven (26%) were >10% lower than reported sample size (max: 79% lower). Conclusions Over half of the prehabilitation RCTs exhibit poor sample size calculation reporting. More stringent reporting requirements are necessary.

4:48 pm

Do multidisciplinary team meetings change general surgical outcomes, or our way of thinking?

Jessica Paynter

4:56 pm

Prevalence and predictors of hypercoagulability as detected by rotational thromboelastometry in peritoneal malignancy patients undergoing cytoreductive surgery

Elizabeth Skalkos

Purpose Cytoreductive surgery (CRS) with hyperthermic intraperitoneal chemotherapy (HIPEC) is an established treatment for peritoneal malignancy. A hypercoagulable state in these patients and the associated risk of venous thromboembolism (VTE), remains the commonest cause of 30-day mortality. This study aimed to evaluate the prevalence and perioperative factors associated with baseline hypercoagulability detected by Rotational thromboelastometry (ROTEM), a point-of-care haemostatic assay, in peritoneal malignancy patients. Methodology A retrospective cohort study was performed in a peritoneal malignancy unit on patients undergoing CRS 2019-2023, who underwent baseline ROTEM testing. Patients were divided into Group A (hypercoagulable) and Group B (normal coagulation). Baseline characteristics, pathology results, operative details and post operative outcomes were reviewed. Univariate and multivariate analysis were used to identify factors associated with baseline hypercoagulability. Results 70 patients were included, 23 patients in Group A (32.9%) and 47 patients in Group B (67.1%). Group A had a lower preoperative haemoglobin ($p<0.001$), higher platelet count ($p=0.001$) and a significantly higher median peritoneal carcinomatosis index (33 vs 10, $p=0.003$). Appendiceal primary was associated with hypercoagulability (47.8% vs 23.4%, $p=0.039$). Although Group A had a higher incidence of VTE events (30.4% vs 23.4%) this was not statistically significant. Conclusions Baseline hypercoagulability exists in one-third of patients with peritoneal malignancy, and was associated with increased tumour burden and primary tumour type. The increasing use of ROTEM is a valuable tool for perioperative management of peritoneal malignancy patients.

5:04 pm

Role of Indocyanine Green (ICG) in mapping sentinel cervical lymph node involvement in patients of oral squamous cell carcinoma using conventional ICG surgical system – data from a university hospital

Abhinav Arun Sonkar

Introduction Lymph node (LN) positivity is an important determinant in a patient of oral SCC. Sentinel lymph node (SLN) biopsy may aid in minimizing the extent of elective neck dissection (ND). ICG dye facilitates the visualization of lymphatic vessels, and sentinel nodes, and provides high penetration during surgery. Materials and Methods It is a prospective observational study in 2021-2022. N=32 patients of oral SCC were injected with 1mL of ICG submucosally in 4 quadrant fashion (3,6,9 and 12 o'clock). After elevation of the platysmal flap and posterior retraction of the sternocleidomastoid muscle (15 minutes after injecting ICG), fluorescing LNs were detected using conventional surgical NIR (Near Infra-red) fluorescence imaging (STRYKER AIM 1588 camera system) and were sent for frozen section and histopathological examination (HPE). Results The majority were carcinoma buccal mucosa (53%), followed by the tongue (22%) and GB sulcus (12.5%). The most common method of ND was modified radical ND 78%, followed by supra omohyoid 12.5%, extended supra-omohyoid 6.25%, and radical ND 3.1%. A total of 755 LNs were harvested. 82 lymph nodes were identified as SLN using the ICG method. Level Ib was identified as SLN in 26/32 of the cases, followed by level Ia and level IIa (3/32 cases each). 22 out of 82 SLN were positive in the frozen section and HPE respectively with a sensitivity of 100%, specificity of 91.8% and NPV (negative predictive value) of 100%.

Routine pathology demonstrated occult metastasis exclusively in SLN in 10 cases (31.25%). Conclusion NIR using ICG is a feasible and promising method for SLN biopsy in cN0 oral SCC using a conventional surgical ICG system.

5:12 pm
A Retrospective Case Series Evaluating Efficacy of Single Port Thoracoscopic Lobectomy in Patients with Severely Compromised Lung Function (Predicted Postoperative Diffusing Capacity of the Lung for Carbon Monoxide % < 40%)
Jyotindra Singh

5:20 pm
Impact of age on postoperative mortality rate, length of stay and survival following a pancreatic resection
Joshua Li
Purpose As the population ages, the incidence of pancreatic cancer is expected to increase with most patients being diagnosed in their 70s and 80s. Pancreatic resections were historically associated with high morbidity and mortality but outcomes in Australia have improved significantly. We aimed to evaluate the effect of age on survival and postoperative outcomes of pancreatic resections. Methodology 391 patients who underwent a pancreatic resection at a high volume centre between January 2005 and June 2022 were identified from a prospectively maintained database and categorised into age groups <70, 70-74, 75-79 and 80+. Baseline clinicopathologic features were analysed and postoperative mortality rate (POMR), length of stay (LOS) and overall survival (OS) were compared between the <70 group and the older groups using the Kaplan-Meier method and univariable and multivariable Cox regression analyses. Results Compared to the <70 group, increasing age was not a significant predictor of POMR (HR=2.63, 2.58, 1.37 and p=0.086, p=0.115, p=0.771 for 70-74, 75-79 and 80+ respectively) nor median LOS (HR=3.02, 3.50, 3.00 and p=0.329, p=0.321, p=0.573 for 70-74, 75-79 and 80+ respectively). Compared to the <70 group, the 75-79 group had poorer 1-, 3- and 5-year OS (p=0.01, p=0.04, p=0.03 respectively) and the 80+ group had poorer 3- and 5-year OS (p=0.02, p=0.049 respectively). Conclusions While overall survival is poorer in some instances, older age was not associated with postoperative mortality or hospital length of stay. Thus, carefully selected elderly patients can still safely undergo pancreatic cancer resection with acceptable outcomes.

---

08 May 2024

5:30 pm - 6:30 pm
ANZAPS ANNUAL GENERAL MEETING

Business Meeting - Paediatric Surgery - Bealey 4

5:30 pm - 6:30 pm
ENDOCRINE SURGERY SECTION ANNUAL BUSINESS MEETING

Business Meeting - Endocrine Surgery - Dobson 2

5:30 pm - 6:30 pm
RCSED RECEPTION

Cocktail - *Cross Discipline* - Bealey Foyer

5:30 pm - 6:30 pm
WOMEN IN SURGREY NETWORKING FUNCTION

Cocktail - Women in Surgery - Waitaki

08 May 2024

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Plastic & Reconstructive Surgery, Burn Surgery, Craniomaxillofacial Surgery

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Colorectal Surgery

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Transplantation Surgery, Vascular Surgery, Military Surgery

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Paediatric Surgery

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Surgical History, Surgical Leaders, Surgical Education

7:00 pm - 10:30 pm
SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Surgical Oncology, Otolaryngology Head & Neck Surgery

09 May 2024

7:00 am - 8:20 am
MASTERCLASS (MC11): THE ABC OF ACUTE BURN CARE (TICKETED EVENT)

Masterclass - General Surgery, Plastic & Reconstructive Surgery, Paediatric Surgery, Trauma Surgery, Burn Surgery - Dobson 1

Burn injuries can affect anyone, anywhere at anytime - ranging from a minor annoyance managed at home, through to the life-threatening condition needing urgent transfer to a burn service. The real challenge are those in between these extremes - patients that require expert care delivered by people who may not feel that they are experts. This Masterclass will cover the basics of good burn care delivered by experts in the field - Dane Holden - Victorian Adult Burns Service, The Alfred, Craig McBride - Surgical Team: infants, toddlers and children at Children's Health Queensland and Richard Wong She - National Burn Centre, Middlemore Hospital, New Zealand. Topics covered include burn wound assessment, immediate burn care, referral and acute surgery. This will be relevant to trainees in general, paediatric and plastic and reconstructive surgery, as well as fellows involved in trauma working outside of a burn service.

7:00 am
Acute Burn Care for Non-Burn Surgeons
Richard Wong She

7:00 am - 8:20 am
MASTERCLASS (MC12): ROBOTICS (TICKETED EVENT)

Masterclass - Colorectal Surgery - Dobson 2

7:00 am
Device Technologies Sponsor Presentation
Adam Brown

7:05 am
Training in robotics
Craig Lynch

7:15 am
Hugo vs. Da Vinci - robot wars
Kim-Chi Phan-Thien

7:25 am
Robotic pouches
Amy Lightner

7:35 am
Ventral mesh rectopexy

7:45 am
Perfect pouches

7:55 am
Rectal dissection

8:05 am
Discussion

7:00 am - 8:20 am
MASTERCLASS (MC13): COMPLEX INCISIONAL HERNIA REPAIR: PLANNING AND SURGICAL TECHNIQUES (TICKETED EVENT)

Masterclass - Hernia Surgery, General Surgery - Dobson 4

7:00 am
Case Study for Masterclass
David Wardill

7:15 am
Case Study for Masterclass
Hugh McGregor

7:30 am
Complex hernia management
Barbora East

7:00 am - 8:20 am
MASTERCLASS (MC14): SETTING UP A VASCULAR SERVICE RESPONSIBLY (TICKETED EVENT)

Masterclass - Vascular Surgery - Dobson 3

7:00 am
Obex Medical Sponsor Presentation
Stefan Olivier

7:05 am
Informed consent
Pradeep Mistry

7:15 am
REmote AVF service
Manar Khashram

7:25 am
Surgeon-led Carotid Service (TCAR)
Ross Milner

7:45 am
Running a remote vascualr unit
Carmen Ruiz

7:55 am
Improving health literacy
Pradeep Mistry

8:05 am
Genetics clinic
Manar Khashram

8:15 am
Discussion

7:00 am - 8:00 am
MORNING YOGA

Breakfast Session - *Cross Discipline* - Exhibition Hall E1/2/3

7:00 am - 8:20 am
WOMEN IN SURGERY BREAKFAST AND ANNUAL BUSINESS MEETING (TICKETED EVENT)

Breakfast Session - Women in Surgery - Conway 4 - Conway 5

7:00 am
Breakfast commences

7:30 am
WiS Section Annual Business Meeting
Pecky De Silva

7:45 am
Invited presentation

8:15 am
Photography

---

09 May 2024

8:30 am - 10:00 am
ACTIVISM IN HEALTHCARE

Scientific Session - Trainees Association, Indigenous Health, Surgical Education - Conway 2

8:30 am
Activism in Healthcare
Rawiri McKree-Jansen

9:00 am
Healthcare workers for Gaza
Ruba Harfeil

9:15 am
Filling in the Gaps
Sue Bagshaw

9:30 am
Discussion

8:30 am - 10:00 am
COMMUNICATION AND CONSENT

Scientific Session - Younger Fellows, Medico-Legal - Bealey 3

8:30 am
Consent and issues/risk around intra-operative change of surgical plan
Hamish Gray

8:50 am
The evolution of surgical consent and its current challenges
Nunzio Franco
The evolution of surgical consent standards in Australia, as guided by the Royal Australian College of Surgeons (RACS), reflects a historical shift from a paternalistic approach to contemporary principles emphasizing patient autonomy and comprehensive information disclosure. The journey has seen a transition from a lack of formalized consent in early surgical practices to the current emphasis on shared decision-making. While RACS advocates for transparent communication and documentation, contemporary challenges arise from the time pressures inherent in modern surgical practice. The historical trajectory

underscores a commitment to ensuring patients are well-informed about procedures, risks, and alternatives. However, the exigencies of today's fast-paced surgical environment pose a potential threat to the thoroughness of the consent process. This presentation discusses the tension between historical ethical imperatives and the practical constraints faced by surgeons today. It prompts a critical examination of how time pressures may undermine the capacity to obtain truly informed and voluntary consent, inviting surgeons to navigate this delicate balance in their commitment to patient welfare and ethical practice.

9:00 am
(Un)Informed Consent and the Erosion of the Doctor-Patient Relationship
Dale Andrew
Since the mid twentieth century, informed consent (IC) has evolved to become possibly the most fundamental concept underpinning modern medicine1. The right to exercise one's autonomy, free from influence, is heralded as a near-universal right, protecting the interests and personhood of the patient1,2. Despite this being a widely accepted truth however, the efficacy of gaining IC has remained elusive. Both doctors and patients report dissatisfaction with current consent processes and many studies have sought ways to improve this2. Most of these are centred around the critical steps of information disclosure and understanding which enable autonomy to be maximised2. These studies have largely been unsatisfactory with mixed results, but all earnestly express a desire for improvement in the system2. This presentation will focus on how the majority of these educational adjuncts fundamentally miss the point and will continue to show unsatisfactory results without a culture shift in how we view consent. A brief reflection on the history of IC reveals why a return to ensuring this is critically set within the doctor-patient relationship, and is recognised as a therapeutic step in and of itself is paramount. Without prioritising IC in this way, dissatisfaction will continue for both parties and compromise the validity of consent itself. 1. Maclean A. Autonomy, informed consent and medical law: a relational challenge. Cambridge, UK: Cambridge University Press; 2009. 2. Glaser J, Nouri S, Fernandez A, Sudore RL, Schillinger D, Klein-Fedyshin M, et al. Interventions to Improve Patient Comprehension in Informed Consent for Medical and Surgical Procedures: An Updated Systematic Review. Med Decis Making. 2020 Feb;40(2):119–43.

9:10 am
The Dysregulated Surgeon: Consequences for them and their team
Richard French

9:30 am
Solutions to the wicked and persistent problem of those who are unprofessional and disruptive
Danette Wright

9:45 am
Discussion

8:30 am - 10:00 am
COWLISHAW LECTURES AND FREE PAPERS

Scientific Session - Surgical History - Bealey 5

8:30 am
Disruption - A focus on the Plaque
Felix Behan

8:50 am
Leonard Braddon and the conquest of beri-beri in Malaysia
Keanghee Lim

9:00 am
Frere Jacques Beaulieu: The rogue Lithotomist
Damien Gibson
Jacques Beaulieu, born to a humble family in Burgundy, France, embarked on an unconventional path to medical practice. Initially joining the cavalry, his career took a pivotal turn when he apprenticed under the lithotomist and hernia surgeon, Paulomi. Beaulieu's method involved preoperative cupping and bloodletting by his four assistants, followed by mass surgical procedures on a portable lithotomy table, often

drawing large audiences. His postoperative practices were notably evasive, as he frequently left towns swiftly after surgeries. In a significant life shift around 1690, Beaulieu adopted monastic garb and the name Frère Jacques, dedicating his life to service and minimal compensation, often donating to the poor. Innovatively, he transitioned from median to lateral perineal lithotomy, enhancing access to bladder stones. His technique, however, led to a high mortality rate, particularly evident during his services at the Hôtel Dieu in Paris, where he faced a 53.5% mortality rate due to severe complications like the transection of the internal pudendal artery. This outcome led to a five-year ban from Parisian hospitals. Resuming his practice in 1702 after studying anatomy, Beaulieu shared his lateral lithotomy technique in Holland with John Jacob Rau. His career, spanning over 30 years, involved approximately 5,000 lithotomies, marking him as a prominent figure in 17th-century lithotomy. Beaulieu retired at 60 and passed away in 1719, leaving a complex legacy of surgical innovation marred by high patient mortality. References: Carson, Culley C. and Ganem, Jacques P. "Frere Jacques beaulier: From Rogue Lithotomist to Nursery Rhyme Character". The Journal of Urology. Vol. 161, 1067-1069. April 1999.

9:10 am
Temporary Ectopic Implantation of an Amputated Hand – Homage to Marko Godina
Richard Hamilton
During Midsummer 1979, at the first Microsurgery Centre in Sweden, we were faced with a difficult replantation case. A young boy with a multilevel sharp amputation from a hay cutting machine with complete amputation of his hand. Replantation was carried out with multilevel repairs of neurovascular and skeletal structures. Initial success was achieved but subsequently reoperations were required for microvascular revision. Eventually we saved the forearm to the wrist joint level but the hand was lost. The boy was fitted with a myoelectrical prosthesis. The question was could we have performed better? 1983/84 Slovenian microsurgeon Marko Godina implemented the new principle of Temporary Ectopic Implantation (TEI) in two cases, with revplantation of fingers and the hand. The fingers were implanted in the groin, but anastomoses ruptured from hip movement. The groin proved unfavorable. Next, an amputated hand similar to ours, the Temporary Ectopic Implantation (TEI) at the axilla. This was successful and finally the hand was replanted orthotopically later. One of our most ingenious colleagues had introduced a new controversial, principle in surgical trauma. Marko Godina tragically died in a traffic accident February 1986, but his manuscripts of Sept 1986 were published in the American journal PRS . Well after our experience, “Damage Control” became an important concept in major trauma, with motto: “Let the patient live to fight another day!” The parallel in microsurgery is “Let amputate survive by ectopic implantation for later replantation!” The principles of TEI which could have applied if known back in 1979 are discussed.

9:20 am
Paul of Aegina: Bridging Surgical Knowledge from Antiquity to the Middle Ages
Justin Yousef
Background: In the early Byzantine era, bridging late antiquity and the Middle Ages, physician-authors like Paul of Aegina significantly advanced surgical knowledge. Paul stood out in the seventh century, overshadowing contemporaries such as Oribasius and Alexander of Tralles with his contributions to surgical practices. Methods: Paul's "Epitome of Medicine" (Pragmateia), a seven-volume medical encyclopaedia, expanded on Galen and Hippocrates, filling gaps left by Oribasius. It detailed various diseases and their surgical treatments. Results: The Pragmateia's sixth book focused on surgery, presenting methods for treating nasal fractures, gynaecomastia, ectropion, and mandible dislocations, and examining intersex anatomy. Johan Heiberg's 1919 survey of the lost manuscript led to its first printing in 1528, but translation efforts were challenging until Francis Adams' English version in 1844. Conclusions: Paul's enduring success in the Middle Ages was boosted by his integration into Islamic Golden Age medical texts. Albucasis in Ummayad Spain notably utilized Paul's work in his "Kitab al-Tasrif," a comprehensive 30-volume surgical guide. This work incorporated Paul's techniques, making it the premier surgical text in Europe, Africa, and the Middle East, thereby cementing Paul's influence on medical practices across these regions. (1) Pormann PE (2004) The oriental tradition of Paul of Aegina’s Pragmateia. Studies in ancient medicine 29:1–337

9:30 am
A history of instruments used for the harvest of skin grafts
Saranya Chiranakorn-Costa

8:30 am - 10:00 am
FUTURE OF PAEDIATRIC SURGERY

Scientific Session - Paediatric Surgery - Bealey 4

8:30 am
Educating the next generation of physicians and surgeons: a paradigm shift
Henri Ford

8:50 am
Paediatric appendicitis risk stratification and care standardisation
Sherif Emil

9:10 am
Necrotising enterocolitis update
Henri Ford

9:30 am
Use of magnets in Esophageal Atresia
Sherif Emil

9:50 am
Discussion

8:30 am - 10:00 am
MIS / ROBOTIC / TECHNOLOGY / CONTROVERSIES

Scientific Session - Colorectal Surgery - Auditorium 4

8:30 am
How to train as a robotic surgeon
Carina Chow

8:42 am
Fluorescence in Australasian colorectal surgery
Craig Lynch

8:54 am
AI in surgery
Isaac Tranter-Entwistle

9:06 am
AI in endoscopy
Rajan N Patel

9:18 am
TaTME update – is it really that bad?
Satish Warrier

9:30 am
SCOTCAP – alternative colonic imaging approaches
Angus James Watson
Introduction Colorectal Cancer (CRC) is the third most common malignancy. It is principally diagnosed by optical colonoscopy (OC). In many health systems demand for OC outstrips its supply, this was worsened by the COVID-19 pandemic. Colon Capsule Endoscopy (CCE) is an alternative lower gastrointestinal (GI) diagnostic test. The aim of this presentation is to chart the introduction and deployment, at scale, of this innovation in a publicly funded national health system. Methods CCE was introduced into NHS Scotland with qualitative, quantitative and health economic assessments. Its deployment was accelerated by the COVID-19 pandemic and supported by a national outcome registry and a central image library. All patient outcome data was collated prospectively into the globe's largest repository of CCE demographic and imaging data. Results Over 6000 patient's data have been collated in the registry. This has facilitated publication of test completion, sensitivity, specificity, and complication rates. The data has expediated

continuous improvement and assisted in the exploration of Artificial Intelligent (AI) reading and reporting of CCE images. The ScotCap programme has contributed to the debate about thresholds for Faecal Immunochemistry Testing (FIT) and removal of diminutive polyps. It has also led to the initiation of the largest CCE diagnostic accuracy study, to date. Discussion CCE is a disruptive innovation in GI diagnostics. With new-entrant cheaper capsules, facilitated by AI reading and the ability for the test to be delivered at a patient's home, CCE is likely to be utilised more in the future. Significant doubts about it's utility remain amongst the clinical community but CCE could have a significant impact on CRC diagnosis.

9:42 am
Panel Discussion

8:30 am - 10:00 am
ORTHOPAEDIC INFECTION - NATIVE AND ARTHROPLASTY

Scientific Session - Orthopaedic Surgery - Conway 1

8:30 am
Complex musculoskeletal infection MDM - Christchurch experience
Alex Lee

8:45 am
Cutibacterium acnes infections in orthopaedic surgery
Sarah Metcalf

9:05 am
Bone infections - case discussoins
Gordon Burgess

9:25 am
Discussion

8:30 am - 10:00 am
QUALITY AND PROGRESS IN HERNIA SURGERY

Scientific Session - General Surgery, Hernia Surgery - Dobson 1

8:30 am
Abdominal wall closure, how to avoid incisional hernia
Rodney Jacobs
Despite the advent of and widespread application of MIS techniques, particularly in general surgery, incisional hernia remains a significant problem. This talk will briefly explore the factors associated with the development of incisional hernia (IH) after laparotomy and ways to reduce the risk of that. It will take an in depth look at the methods employed to close the abdomen and in particular the evidence for using "small bites" technique and mesh augmentation in selected high-risk patients. It will also look at pre and intraoperative strategies to mitigate against SSO/SSI.

8:45 am
Hernia Registry update
Chrys Hensman
The role of Clinical Quality registries as a cost effective quality improvement tool is now established. I will provide an update on the construct and early data from the pilot cloud based ANZJS hernia learning healthcare clinical quality registry.

9:00 am
Role of the robot in complex hernia surgery
Alex Karatassas

9:15 am
Neurectomy techniques for chronic post repair pain
Hugh McGregor

9:30 am
Panel Discussion

8:30 am - 10:00 am
TIPS AND TRICKS - CARBON FOOTPRINT REDUCTION AT WORK: TIME TO CHANGE THE PARADIGM

Scientific Session - Senior Surgeons Program, Surgical Leaders, Younger Fellows, Quality & Safety in Surgical Practice - Dobson 3

8:30 am
What is TWO doing?
Robert Burrell

8:45 am
Reduce, reuse, recycle - a Queensland view
Rhea Liang

9:00 am
Green surgery report
Mahmood Bhutta

9:15 am
A beginner's guide to driving sustainable change in healthcare - the challenges and the opportunities in changing healthcare for good
Oliver Hunt

9:30 am
Reusable products – reducing water, waste and lowering emissions
Donna Freer

9:45 am
Discussion

8:30 am - 10:00 am
TIPS AND TRICKS FOR GENERAL SURGERY WITH TRAUMA

Scientific Session - Rural Surgery, Military Surgery, General Surgery, Trauma Surgery, Plastic & Reconstructive Surgery, Burn Surgery - Dobson 2

8:30 am
Presentation

8:36 am
The complex abdomen and refeeding via entercoutanous fistula
Rukshan R. Ranjan

8:48 am
Code crimison the Auckland experience
Savitha Bhagvan

9:00 am
Burn care for the non-burn surgeon

Richard Wong She
Burn injuries can affect anyone, anywhere at anytime – ranging from a minor annoyance managed at home, through to the life-threatening condition needing urgent transfer to a burn service. The real challenge is represented by those in-between these extremes - patients that require expert care delivered by people who may not feel that they are experts. This talk will cover the ABCs of acute burn care for the non-burn surgeon who finds themselves having to care for a burn patient – from initial assessment (size and depth), emergent care (wound care and dressing for 'minor burns' and escharotomies and burn resuscitation for 'major burns') through to surgical strategies for optimal outcome (debridement, grafting and the use of dermal substitutes) – strategies and techniques which have applicability to any patient with skin loss.

9:20 am
Spinal injury patients - what do the spinal need before we transfer?
Raj Singhal

9:40 am
Cyclone trauma - how to plan and how can we help?
Basil Leodoro
Vanuatu remains as the highest ranked country on the UN Global Disaster Risk Index. In 2023, three consecutive Category 5 cyclones struck Vanuatu in a space of eight months, destroying community livelihoods, threatening recovery efforts and exhausting the government's ability to respond and recover. Respond Global's health and humanitarian ship, MV HELPR-1 was able to respond immediately following each cyclone, enabling provincial response teams and relief supplies to reach affected communities in remote areas. The experience and evidence from this response highlights the fundamental need to support local leadership and local response as the best response in any disaster while at the same time, strengthening partnerships that can build resilient communities and ensure sustainable outcomes after major disaster.

8:30 am - 10:00 am
WHEN BLOOD MEETS BILE

Scientific Session - HPB Surgery, Vascular Surgery - Dobson 4

8:30 am
Diagnostic of abdominal vascular compression syndromes
Thomas Scholbach
All abdominal compression syndromes are caused by an exaggerated lordosis with a significant reduction of the intra-abdominal space and a compression of structures which cross the spine - veins and parts of the gastrointestinal tract. Thus, all intra-abdominal and many extra-abdominal vascular compression syndromes are part of a single entity - the midline congestion syndrome. Since many midline structures are involved (inner and outer genitals as prostate, uterus, vagina and penis, rectum, urethra, urinary bladder spinal canal, skull, coeliac plexus, duodenum, stomach) the patients present a pittoresque symptomatology and medical history. The potpourri of symptoms can only be explained with the knowledge of the underlying pathophysiology. Unfortunately, still most of the patients are diagnosed as psychosomatic disorders obstructing a proper causal vascular surgical treatment. The increased lordosis is found mainly in women, predominantly with connective-tissue disorders (Ehlers-Danlos syndrome for example). The diagnostics rests on 3 pillars: Clinical symptoms, morphology and function. The quantitative functional colour Doppler sonography is an indispensable means to therapeutic decision making. It defines the localization of the vascular compression, its impact onto the intravascular pressure, the volume and direction of collateral flow, capacity of the collateral route and describes numerically the effect of everyday situations (uptake of food, change of body posture, exercises, micturition etc.) onto these parameters and simultaneously onto the clinical presentation. A successful treatment requires the detection or exclusion of all possible compression syndromes with left renal vein and left common iliac vein compression being the most frequent ones.

8:45 am
Management and complications of compression syndromes
Gert Frahm-Jensen
Median Arcuate Ligament Syndrome (MALS) poses diagnostic challenges due to its diverse symptomatology, including abdominal pain and postprandial distress. This presentation delves into a

pragmatic approach for managing MALS, emphasizing a balance between symptomatic relief and anatomical correction. When non-operative measures fall short, surgical decompression is indicated for alleviation of symptoms and restoration of blood flow, with consideration of coeliac plexus ablation. This presentation underscores the importance of recognising and managing complications inherent to MALS interventions, including potential vascular injury and thrombosis. The risk of recurrence or persistent symptoms post-treatment underscores the importance of long-term follow-up care and patient counselling. This session contributes to refining clinical practices, navigating the evolving landscape of MALS management. By embracing a multidisciplinary approach, we optimise patient outcomes. We highlight the necessity for continued research to enhance our understanding and treatment algorithms for this complex vascular syndrome.

9:00 am
Caval reconstruction with liver resection
Eunice Lee

9:15 am
PV resection: techniques and role of anticoagulation
Sanket Srinivasa

9:30 am
Cholangiocarcinoma: Case presentation and lessons learnt
Oliver Lyons

9:45 am
Questions for the panel

---

09 May 2024

10:30 am - 12:00 pm
PLENARY SESSION: RESPONSIBLE GOVERNANCE

Plenary Session - *Cross Discipline* - Auditorium 4

10:30 am
Opening and introduction
Kerin Fielding

10:35 am
Snapshot - how did we get here?
Owen Ung

10:50 am
What does good governance look like - panel discussion
Shane Solomon, Nic Carr, Souella Cumming

11:30 am
Why, where and how?
Stephanie Clota

11:50 am
Closing remarks
Kerin Fielding

---

09 May 2024

12:00 pm - 12:30 pm
KEYNOTE LECTURE - PROFESSOR HNAT HERYCH (UKRAINE)

Keynote Lecture - Military Surgery, Plastic & Reconstructive Surgery, Vascular Surgery - Dobson 2

12:00 pm
One year of war in Ukraine: what we learnt and what are we now facing?
Hnat Herych

12:00 pm - 12:30 pm
KEYNOTE LECTURE - PROFESSOR IAN HARRIS (SYDNEY)

Keynote Lecture - Pain Medicine & Surgery - Bealey 4

12:00 pm
Placebo surgery
Ian Harris

12:00 pm - 12:30 pm
KEYNOTE LECTURE - PROFESSOR PETER SAGAR (LEEDS, UK)

Keynote Lecture - Colorectal Surgery - Auditorium 4

12:00 pm
Surgery for recurrent rectal cancer - higher and wider?
Peter Sagar
The management of primary rectal cancer has evolved dramatically over the last 30 years, principally focused on the aim of reducing local recurrence. Clinical trials positioned local recurrence at the forefront for treatment outcomes, especially with the evolution of total mesorectal excision and neoadjuvant chemoradiotherapy. This has been achieved to a significant degree with isolated pelvic recurrence falling from 18%–30% to 2%–8%. For patients with local pelvic recurrence, death may be a painful process with the unpleasant prospect of the slow development of a malodorous, fungating, fistulating perineal mass. For patients with local recurrence, there is the possibility of further, albeit more radical, surgery, where excision for cure is a treatment option. The extensive nature of the operative techniques required to obtain clear resection margins carries some morbidity. Yet, concentration of cases in specialised centres along with improvements in perioperative intervention, extended radical resection has become the standard of care. The outcome of these patients is variably reported, often in small(ish) case series from low volume institutions with multiple surgeons. Nevertheless, appreciation of the need to employ appropriate surgical techniques with the aim of achieving an R0 resection has improved the outcome for patients with local recurrence of rectal cancer. The aim of this presentation is to address the surgical challenges, provide operative strategies and encourage a team-based approach to improve long term survival for this unfortunate group of patients.

12:00 pm - 1:30 pm
RACS TRAUMA COMMITTEE

Business Meeting - Trauma Surgery - Bealey 1

12:00 pm - 12:30 pm
RESEARCH PAPERS

Scientific Session - Orthopaedic Surgery - Bealey 3

12:00 pm
Simplified Lumbar spine MRI reports reduce patient anxiety, misperceptions, and inappropriate specialist orthopaedic referrals.
Jae Hyun Jeong
Purpose: Modern information systems have allowed electronic medical records to be readily accessed by patients regardless of location and time. However, medical jargon in radiological reports causes confusion and an over-inflated perception of disease states. Heightened patient anxiety gives rise to inappropriate GP referrals to specialist services. This prospective study aimed to evaluate the effect of using simplified Magnetic Resonance Imaging (MRI) reporting methods in alleviating patient anxiety and altering their perception regarding the required treatment. Methodology: 121 patients were recruited from an outpatient orthopaedic clinic at a tertiary New Zealand hospital. An MRI report was formulated, describing a lumbar spine with age-related degenerative changes. Individuals were randomly assigned to receive either a standard or simplified MRI report. Participants completed an 11-item questionnaire about their perception of the report on a 10-point Likert scale regarding their anxiety and anticipated treatment outcomes. Baseline characteristics such as age, gender and ethnicity were collected. Results: Compared to those who received the standard MRI report, those who received the simplified report believed they had a significantly better understanding of the report (p=0.0012) and lower anxiety (p= 0.0002). Those who received the standard MRI report were significantly more likely to seek inappropriate specialist care (p=0.0019) because they presumed an operation was necessary (p=0.0002). Conclusion: Simplified MRI reporting can reduce unnecessary patient anxiety and potentially reduce inappropriate referrals from GP to specialist orthopaedic services. This may help improve the health system's efficiency.

12:07 pm
Bovine Lactoferrin, A Novel Antimicrobial Adjunct For Use As An Antimicrobial Agent In Battlefield-relevant Open Fractures.
Reece Joseph
INTRODUCTION: Up to 50% of type 3b compound fractures are complicated by biofilm infections [1]. Lactoferrin (Lf), a glycoprotein with antibiofilm properties, is found naturally in animal milk [2]. The goal of this study was to: 1) Demonstrate the in vitro anti-biofilm properties of bLf. 2) Translate the antibiofilm activity of bLf to an in vivo periprosthetic, biofilm infected tibia rodent model. METHODS: 1) S. aureus Xen-36 biofilm generated in a bioreactor on metal coupons was tested against cefazolin (CEF) and flucloxacillin (FLU) with or without bLf. S. aureus colonies (CFU) were enumerated. 2) Surgery was performed on rats (n = 40), where the tibia was drilled and inoculated with Ten µL (≈107 CFU) of S. aureus biofilm. A steel pin was placed within the tibia, and the wound treated with STIMULAN® beads loaded with 4 treatment groups: 1) Control (empty), 2) bLf 3) FLU, 4) bLf and FLU. At day 7 rats were euthanized for tissue/pin collection and enumeration. RESULTS: In vitro: bLf augments the anti-biofilm activity of CEF and FLU 102 to 105 times greater than the antibiotic alone ($p<0.001$), and in combination with FLU in beads, significantly eradicates S. aureus biofilm infection in vivo compared against controls (6/10 eliminated infection, $p<0.001$). DISCUSSION: bLf holds promise as an anti-infective in battlefield relevant open fractures, supported by the anti-biofilm properties of bLF highlighted within this research. REFERENCES: 1) Gustilo R, et al., J Trauma. 24:742-746, 1984. 2) Gould G, et al., J Food Prot 59:82-86, 1996.

12:14 pm
Ceramic-on-ceramic (CoC) cementless short stem hip arthroplasty: a prospective clinical and radiological single centre study of 95 hips demonstrates efficacy and safety.
Johanna Elliott

12:21 pm
Rates of Femoral Head Osteonecrosis/AVN in SUFE following Treatment with Modified Dunn Osteotomy
Rajul Patel

12:00 pm - 12:30 pm
THE JAMES PRYOR MEMORIAL LECTURE

Keynote Lecture - Senior Surgeons Program, Medico-Legal - Dobson 3

12:00 pm
The Medico-Legal World and Te Ao Māori - Navigating the Incommensurable
Chris Cunningham

12:00 pm - 12:30 pm
THE SIR EDWARD 'WEARY' DUNLOP MEMORIAL LECTURE

Keynote Lecture - Military Surgery, Surgical History - Bealey 5

12:00 pm
Sir Edward 'Weary' Dunlop - The Veterans Champion
Ian Civil

---

09 May 2024

12:30 pm - 1:30 pm
CLINICAL TRIALS

Scientific Session - Colorectal Surgery - Auditorium 4

12:30 pm
Multi-centre virtual prehabilitation trial
Cherry Koh, Daniel Steffens

12:45 pm
RCT oral antibiotics and SSI
John Woodfield

1:00 pm
Liver Transplant for non-resectable liver mets
Cherry Koh

1:15 pm
Kono-S RCT
David A Clark

---

09 May 2024

12:45 pm - 1:15 pm
MEDTRONIC LUNCHTIME SESSION: LATEST FASHION FROM EUROPE - EHS TRAINING, PATHWAYS AND GUIDELINES

Scientific Session - *Cross Discipline* - Dobson 4

12:45 pm
Latest fashion from Europe - EHS Training, Pathways and Guidelines
Barbora East

---

09 May 2024

1:30 pm - 2:00 pm
KEYNOTE LECTURE - ASSOCIATE PROFESSOR ANDREW MACCORMACK (AUCKLAND, AOTEAROA NEW ZEALAND)

Keynote Lecture - Quality & Safety in Surgical Practice - Dobson 3

1:30 pm
Sustainable Surgery: the role of quality and safety
Andrew MacCormick

1:30 pm - 2:00 pm
KEYNOTE LECTURE - DR DIANA KOPUA AND MR MARK KOPUA

Keynote Lecture - Indigenous Health, Surgical Education - Conway 2

1:30 pm
Addressing institutional racism
Diane Kopua, Mark Kopua

1:30 pm - 2:00 pm
KEYNOTE LECTURE - DR PATRICK BYRNE (LONDON, UK)

Keynote Lecture - Rural Surgery - Bealey 2

1:30 pm
Effective reflective practice
Patrick Byrne

1:30 pm - 2:00 pm
KEYNOTE LECTURE - DR RACHEL BELL (NEWCASTLE, UK)

Keynote Lecture - Vascular Surgery - Dobson 4

1:30 pm
The epidemic of burnout and bullying in healthcare - what can we do to stop it?
Rachel Bell

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR AMY LIGHTER (CLEVELAND, USA)

Keynote Lecture - Colorectal Surgery - Auditorium 4

1:30 pm
Regenerative medicine in colorectal surgery
Amy Lightner

1:30 pm - 2:00 pm

KEYNOTE LECTURE - PROFESSOR JOHN WINDSOR (AUCKLAND, AOTEAROA NEW ZEALAD)

Keynote Lecture - Pain Medicine & Surgery, HPB Surgery - Bealey 4

1:30 pm
Update of pathophysiology and assessment of pain in chronic pancreatitis
John Windsor

1:30 pm - 2:00 pm
THE ARCHIBALD WATSON MEMORIAL LECTURE

Keynote Lecture - Surgical History - Bealey 5

1:30 pm
The Age of the Surgeon-Anatomist, reflected in the Monro Collection
Terence Doyle
In the three hundred years following the renaissance of anatomy exemplified by Vesalius' The Structure of the Human Body in 1543, surgery began its long journey to its current scientific level. This was the period when invasive surgery was limited; before anaesthesia and antisepsis. Nevertheless, surgeons spent a considerable part of their training in the dissecting room and were well acquainted with the anatomy of the human body. The Monro Collection in Dunedin, being essentially the library of three successive Monro Professors of Anatomy at Edinburgh during the Georgian period from 1720 to 1846, gives an intriguing insight to sources of that anatomical knowledge.

1:30 pm - 2:00 pm
THE KEN LOI KEYNOTE LECTURE

Keynote Lecture - General Surgery, Hernia Surgery - Dobson 1

1:30 pm
Between Elpis and Ate: is there a space in the middle?
Ramana Balasubramaniam
Obesity is one of the major co morbidities in patients with incisional and ventral hernias. In nearly two-thirds of our patients, we are faced with the daunting task of finding a way to help patients to overcome the challenges of managing two progressive and potentially disabling and life threatening problems. What does the evidence really say? What are surgeons really doing? What is the outlook of our current and future approaches to these twin troubles? The talk will be an exploration of this subject.

---

09 May 2024

2:00 pm - 3:30 pm
CULTURAL SAFETY AND COMPETENCY: BEYOND THE TICK BOX

Scientific Session - Indigenous Health, Surgical Education - Conway 2

2:00 pm
Review of Māori equity in surgical trainee selection
Calum Fisher

2:20 pm

Rongoa Māori in surgical consults
Nasya Thompson

2:30 pm
Advancing Maori representation in Surgery: Support systems and barriers
Nasya Thompson

2:40 pm
Navigating Hauora Māori Equity
Maira Patu

3:00 pm
The Periop Karakia: a case study in equity
Arihia Waaka

3:20 pm
Feet and fistulae: the importance of vascular surgical cultural safety
Justin Cain

2:00 pm - 3:30 pm
CUTTING EDGE / CONTROVERSIAL

Scientific Session - Surgical History - Bealey 5

2:00 pm
Artificial hearts - could we; should we? A controversial Medical Technology and its Sensational Patient Cases
Shelley McKellar
This presentation examines the early clinical use of artificial hearts (1960s-1990s), situating the triumphant narrative of this technology and its 'resurrectionist capacity' alongside technical device challenges and difficult patient experiences. The appeal was the promissory nature of artificial hearts as a life-sustaining treatment. Yet, in specialized cardiac centres, a relatively small number of surgeons explored the two emerging cardiac replacement procedures—heart transplantation and the implantation of artificial hearts—that soon became intertwined surgical treatments for end-stage heart failure. Artificial hearts were an imperfect technology, and its controversial history speaks to questions of expectations, meanings of success, limitations, and uncertainty in a high technology medical world.

2:30 pm
Laurence Michael Dillon – the history of a remarkable doctor and patient
Alistair McCombe
Born in wartime England 1915, Dillon was assigned female at birth, however at the age of 24 he began his transition to a male by starting hormone treatment with testosterone – the effects and risks of which were poorly understood. He went on to receive one of the first recorded double mastectomies for gender reassignment. He then came to meet the pioneering Harold Gillies who performed up to 13 procedures on Dillon between 1946 and 1949, to complete the first ever female-to-male phalloplasty. His professional career took him from the motor garages of Bristol to the medical school at Trinity College Dublin. Published author, naval surgeon, and finally, a Buddhist monk – a rich, complex, and inspiring tale.

2:40 pm
The History of Vaginoplasty for Gender Affirming Surgery
Alisha Fong

2:50 pm
Lenin, Krupskaya and Kocher. The meeting of the First Lady of the Soviet Union and the Father of Thyroid Surgery.
Nadezhda Krupskaya, was the wife of the founding father of the Soviet Union, Vladimir Lenin, and in her own right an important figure in pre- and post-revolutionary Russia. She was an outspoken opponent of Stalin and was made a political pariah after the death of her husband. She suffered from Graves' disease and experienced exacerbations whilst exiled from Imperial Russia for revolutionary anti-Tsarist activities. Graves' disease and its treatment were poorly understood, and after trialing a series of unsuccessful contemporary

medical treatments, she underwent thyroid surgery in 1913, performed by Swiss surgeon, Theodor Kocher. Kocher, already internationally renowned, was awarded the Nobel Prize in Physiology or Medicine in 1909 for his work on thyroid physiology and surgery for goitre. He was the pre-eminent authority on thyroid disease, being widely published. Generations of surgeons were influenced by his “Textbook of Operative Surgery”. This documented, amongst many other subjects, his methodologies in anaesthesia and the practice of thyroid surgery. Through letters written by Lenin and Krupskaya, we learn of their experience of Graves’ disease treatment in the early twentieth century and how the “first lady” of the socialist revolution came to be treated by the celebrity surgeon, the father of thyroid surgery.

3:00 pm
Sir Geoffrey Keynes: A Surgical Luminary and Historian - From Blood Transfusion to Trailblazing Breast-Conserving Surgery
Nelson Smith
This presentation delves into the extraordinary contributions of Sir Geoffrey Keynes, a renowned surgeon whose pioneering spirit left an enduring impact on surgical history. Focused on his ground-breaking work in blood transfusions and revolutionary approaches to breast cancer surgery, Keynes emerges as a luminary who significantly advanced the fields of surgery, oncology, and transfusion medicine. Keynes' work on blood transfusion stands as a milestone in medical history, transforming surgical outcomes through the introduction of stored blood for procedures. This presentation places particular emphasis on Keynes' transformative efforts in breast cancer surgery. His advocacy for breast-conserving techniques including limited mastectomy challenged prevailing norms, and demonstrated a profound understanding of the importance of preserving not only lives but also the quality of life for cancer survivors. His meticulous documentation of outcomes and dedication to refining these techniques paved the way for modern oncoplastic surgery long before the term gained widespread recognition. Beyond his technical contributions, Keynes was a fervent advocate for preserving and documenting the history of surgery. His meticulous efforts in collecting and cataloguing historical surgical instruments, manuscripts, and artefacts have provided invaluable insights into the evolution of surgical practices throughout the centuries. By reflecting on the multifaceted contributions of Sir Geoffrey Keynes, this presentation aims to inspire present-day surgeons to not only push the boundaries of surgical innovation but also appreciate the rich historical tapestry that shapes their profession.

2:00 pm - 3:30 pm
HOW TO NAVIGATE PROFESSIONAL RISK IN A TIME OF MULTIPLE CONSTRAINTS IN THE HEALTH CARE SYSTEM

Scientific Session - Medico-Legal, Senior Surgeons Program, Younger Fellows, Surgical Leaders, Trainees Association - Conway 3

2:00 pm
Managing clinical risk in times of capacity constraint
Jonathan Coates

2:20 pm
Navigating the complaint process
Harry Waalkens KC

2:40 pm
The role of the HDC in the complaints process and the role of medical experts
Vanessa Caldwell

2:00 pm - 3:30 pm
HPB IN THE YOUNG

Scientific Session - Paediatric Surgery, Global Health, HPB Surgery - Conway 1

2:00 pm
Safe cholecystectomy - how I do it

Todd Hore

2:15 pm
Pancreatic tumours of childhood
Michael Nightingale

2:30 pm
Duodenal Conditions of Childhood
Prabal Mishra

2:45 pm
Hepatoblastoma management
Peter Carr-Boyd

3:00 pm
Meso-Rex Shunts in the Management of Extrahepatic Portal Vein Obstruction in Children: A Case Series
Lana Bricknell
Purpose: Extrahepatic portal vein obstruction (EHPVO) is a major cause of portal hypertension in children. The meso-rex shunt is the recommended treatment, where a vein graft is placed between the superior mesenteric vein and the left portal vein. Given the complexity of this operation and the rarity of this condition, it has been performed in a limited number of centres worldwide. This is the first case series in Australia or New Zealand on this technique. Methodology: Data was collected retrospectively from the hospital medical records of all patients who had a meso-rex shunt for EHPVO at the Queensland Children's Hospital. The primary outcomes collected included post-shunt technical complications, post-shunt interventions, mortality and symptom resolution. Results: 18 patients had a meso-rex shunt performed at the Queensland Children's Hospital. The internal jugular vein was used as a graft in 77.8% (n=14) of patients. Three patients (16.7%) used another type of vein, which included the superficial femoral vein, coronary vein, and inferior mesenteric vein. In one patient no vein graft was used (5.5%). The success rate, which was defined as a patent shunt on long term follow-up, was 83.3% (n=14). The shunt thrombosis rate was 22.2% (n=4) all of which required return to theatre. Conclusion: This series demonstrates that meso-rex shunts can be an effective treatment option for the management of EHPVO in the Australian population, as supported by the wider literature. This is the first published series of patients who have undergone a meso-rex shunt in Australia or New Zealand.

3:10 pm
Case presentation
Hannah Kim

2:00 pm - 3:30 pm
OPTIMIZING PAIN MANAGEMENT ACROSS THE PERIOPERATIVE SPECTURM

Scientific Session - Pain Medicine & Surgery - Bealey 4

2:00 pm
The perioperative management of pain. What a surgeon needs to know?
Dick Ongley

2:30 pm
Is Cannabinoid Analgesia ready for prime time?
John Alchin

3:00 pm
The Christchurch Hospital Transitional Pain Service
Julia Singhal, Sally Fitzgerald

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - Plastic & Reconstructive Surgery - Bealey 3

2:00 pm
Mutilating hand
Andrew Hart

2:20 pm
Navigating the reconstruction of the mangled hand and beyond
Oliver Hovav
Introduction: The term 'mangled hand' encompasses a spectrum of tissue damage involving bones, nerves, tendons, and soft tissues that necessitate formal composite reconstruction. From historical amputation to modern technology, hand salvage surgery continues to recreate lost anatomy and function. This presentation will explore navigational challenges in managing the mangled hand and share experiences using a range of autologous bone reconstructions. Furthermore, it will explore the application of virtual surgical planning (VSP) in the mangled hand. Methods: A retrospective review of seven cases involving mangled hands across two institutions within the last decade was conducted. Each case presented a unique challenge with a distinctive reconstruction, with and without the use of VSP. Data, including reconstruction technique, number of operations, length of operation, and the use of VSP, were collected. Results: Replantation included bilateral multiple digit repairs and a toe-to-thumb transfer. Metacarpal reconstruction included the use of autologous bone flaps from the fibula, medial femoral condyle, and the deep circumflex iliac artery flap. The median number of reconstructive procedures, follow up and length of surgery was 7.3 per patient, 34 months, and 498 minutes respectively. Complications occurred in 83% of patients and the use of VSP was employed in 57% of cases. Conclusion: This presentation aims to dissect the multifaceted intricacies inherent in mangled hand cases. Furthermore, the authors explore the continuum of surgical strategies and observes the beneficial role of VSP in the post-acute care of these patients.

2:30 pm
Digital Salvage in a Critically Ill Paediatric Patient using PeriArterial Dysport®
Lucinda Van de Ven
Background Critical illness from conditions such as Streptococcus Toxic Shock Syndrome can necessitate high concentrations of sympathomimetic pressors. Resultant vasopressor-induced ischemia of the hand is a severe complication of their life saving care. It can often result in digit necrosis and amputation with resultant poor aesthetic and functional outcomes. Currently, there are no widely accepted approaches for treating this cause of peripheral digital ischemia. Management ranges from no intervention in a “watch and wait approach” to early surgical arteriolysis. More recently, Botulinum Toxin (Botox) has been described for the treatment of vasospastic disorders of the hand and is known to effectively treat several disorders, including overactive bladder, cervical dystonia, and chronic migraines. Case Report This is a case report of the use of local injections of Dysport® for the treatment of digital ischemia in a septic ICU paediatric patient. It was utilised in a two year old with Streptococcus Toxic Shock Syndrome with digital ischaemia in all four limbs. We will discuss the outcomes as well as a suggested treatment protocol. Conclusion This case report will demonstrate the successful use of Botox in digital ischaemia in sepsis. We will discuss the outcomes as well as a suggested treatment protocol. There is further scope for use of Botulinum Toxin in digital ischaemia and an introduction of protocols in critical care settings.

2:40 pm
Comparing abdominal weakness, bulge and hernia following bilateral breast reconstruction with MS-TRAM, SIEA, conventional DIEP and robotic-assisted DIEP flaps: a single surgeon’s experience of 288 consecutive flaps and systematic review of the literature
Joseph Dusseldorp
Purpose: No consensus exists on the ideal technique to maximise abdominal wall function following bilateral autologous breast reconstruction (BR). We aimed to systematically identify strategies that minimise abdominal wall weakness, bulge and hernia rates. Methodology: A systematic review was performed using PRISMA guidelines to compare abdominal wall function following BR with abdominal flaps. 144 consecutive patients (288 flaps) who underwent bilateral abdominal-based flap BR between 2020 – 2023 were included. Surgical strategy groups were divided into: conventional single perforator DIEP with intramuscular split, medial/lateral paramuscular approach to pedicle dissection, robotic-assisted DIEP harvest, multiple perforator DIEP, SIEA flap, or muscle-sparing TRAM flap. Pre-/post- abdominal function, bulge and hernia rates and pre-/post-BREAST-Q data were evaluated. Results: Forty-one articles met the criteria for inclusion. DIEP and SIEA flaps yielded superior abdominal function compared to pedicled, free, and muscle-sparing TRAM flaps. In the series, bulge and hernia rates were 3% using more invasive techniques and 0% in SIEA, robotic-assisted and medial para-muscular pedicle dissection. These less

invasive techniques demonstrated greater improvement in physical wellbeing abdomen module (BREAST-Q) and abdominal function compared to more invasive techniques. Conclusion: Less invasive flap types such as DIEP and SIEA flaps yield superior abdominal muscle function outcomes compared to TRAM flaps, both in the literature and according to our experience. More sensitive muscle function tests are needed to identify any additional utility of novel minimally invasive techniques such as robotic-assisted DIEP and medial para-muscular pedicle dissection.

2:50 pm
The effect of radiotherapy injury on adipose derived stem cells - why we need to introduce healthy fat to the irradiated microenvironment
Nupur Shukla
Purpose: Fat grafting has shown many benefits in mitigating radiotherapy induced soft tissue injury. However, little research has been done to determine the direct effects of radiotherapy on adipose derived stem cells (ADSCs), the regenerative constituents of fat graft. We present an invitro study which firstly, focuses on interrogating key homeostatic functions of ADSC and secondly, by exploring the molecular alterations resulting from 10Gy irradiation of ADSC compared to 0Gy controls. Methods: Functional homeostatic assays were conducted comparing proliferation, apoptosis, migration and adipogenic differentiation of control 0Gy and irradiated 10Gy ADSC. Molecular analysis included next generation sequencing and qualitative polymerase chain reaction analysis of adipogenic differentiation genes. Results: The results in this presentation demonstrate the adverse impact of radiotherapy injury to ADSCs. The reduction in proliferation as well as apoptosis demonstrates that irradiated ADSC, like endothelial populations, acquire a state of senescence and persist as cells unable to successfully perform key homeostatic functions. The diminished capacity of irradiated ADSC migration and adipogenic differentiation all represent significant impairment in the capabilities of these cells to carry out their regenerative functions. Conclusion: Radiation impairs loco-regional ADSC function, therefore requiring the introduction of healthy adipose tissue and ADSC through fat grafting to reconstitute this cell group's functions. Future research involves manipulation of key molecular and metabolomic candidates to further improve the microenvironment and attempt to mitigate radiotherapy injury to both targeted and grafted ADSC.

3:00 pm
Overcoming Challenges in Irradiated Breast Reconstruction: Fat Graft Priming After Tissue Expansion
Nupur Shukla
Case: A 64-year-old female presented a challenging breast reconstruction case following radiorecurrent left-sided breast cancer. Her history included bilateral breast cancer treated with surgery and high-dose radiotherapy, leaving thin, fibrotic mastectomy skin flaps and high risk of complications with implant-based reconstruction. Given comorbidities and body habitus, autologous reconstruction was also unfavourable, limiting her options. Method: The patient underwent bilateral subpectoral tissue expander (TE) placement with an Acellular Dermal Matrix and gradual expansion to 550cc and 525cc on the left and right respectively. Preoperative US-guided measurements of cutaneous tissue thickness above the TE in 4 standardised areas were measured, marked, and photographed. Subsequently, she underwent three rounds of TE deflation and fat grafting. Results: The patient exhibited a remarkable clinical response, showing significant improvements in skin quality, including the resolution of peau d'orange appearance and lymphedema, softer skin texture and thicker skin-flaps, which were objectively assessed with serial US measurements. The regenerative effects of fat primed the skin for definitive implant-based reconstruction. Interestingly, the lower lateral quadrant displayed lowest receptivity to fat grafting, possibly due to its susceptibility to lymphedema, making it a less favourable grafting site. Conclusion: Fat grafting played a crucial role in facilitating successful breast reconstruction, in this case. This highlights the therapeutic potential of serial fat grafting in radiation-induced skin change. It offers an alternative technique for managing such cases, priming tissue, and reducing reconstructive complications.

3:10 pm
Immediate prosthetic breast reconstruction – The Austin Health experience
Evania Lok
Purpose: An implant based reconstruction is the most common post mastectomy breast reconstruction performed in Australia. Direct to implant (DTI) reconstructions are usually limited to small to moderate volumes due to high risk of complications and breast pocket control. Austin Health performs a large number of DTI breast reconstructions which challenge conventional algorithms of implant volume and timing in the setting of improved surgical techniques and innovations. Methodology: A retrospective chart review was conducted on all DTI reconstructions performed at Austin Health from 2017 to 2022. Patient and implant data points were collected. Clinical outcomes evaluated included surgical site complications while patient-related outcomes were assessed with use of the BREAST-Q questionnaire. Results: 73 patients

(mean age 47, average BMI 25.2 kg/m) underwent DTI reconstruction with 114 implants (median mastectomy weight 372g, median implant size 420cc). All patients except for one had acellular dermal matrix placed (Tiloop n=87, FlexHD n=26). 63 large volume implants were used (>400cc). 13% implants had greater than 150cc positive size difference than the mastectomy weight. There are 3 implant losses and 10 capsular contractures, 9 of which received adjuvant radiotherapy. 68% patients completed Breast Q with a mean overall score 74% (67% satisfaction with breast and 76% chest wellbeing). Conclusion: DTI breast reconstruction is a viable single stage reconstructive option following mastectomy with positive patient related outcomes. Larger implant volumes can be successful with recent surgical advances to optimise the pocket and should not be a limiting factor during reconstructive planning.

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - Colorectal Surgery - Auditorium 4

2:00 pm
Anal botox injection in the outpatient clinic is an effective alternative to injection under general anaesthesia for chronic anal fissure
Neeraj Khatri
Purpose: Chronic anal fissures are a disabling condition. Botulinum A toxin (botox) injection to the anal sphincter is an established treatment option. In many centres in New Zealand (NZ) and Australia botox injection is performed under general anaesthesia (GA), resulting in significant resource consumption. We investigated the efficacy of healing chronic anal fissures with botox in the outpatient clinic (OPC) setting without sedation. Methods: A retrospective audit was performed at Waikato Hospital, NZ, from September 2011 to September 2013. All patients underwent anorectal examination in a General Surgery OPC and botox injection was performed after clinical diagnosis of a chronic anal fissure. Demographic data and co-morbidity that might impact fissure healing rates were recorded. Patients were followed up with a phone call or in person after at least 2 weeks. Success was defined as patient-reported symptom resolution or improvement such that no further treatment was required. Results: 163 patients treated during the study period (male=54, median age=40.5 [Range 15-88). At 2-week or subsequent evaluation, satisfactory symptom resolution was reported in 106 patients (65.0%) after one injection. Satisfactory symptom resolution was achieved in 134 patients (82.2%) after 2 or less botox injections. Refractory symptoms were reported after two injections in 29 patients (17.8%) who were then offered a 3rd botox injection in the outpatient clinic or examination under GA. Conclusion: Botox injection in an OPC setting can achieve symptom resolution for chronic anal fissures with similar rates to injection under GA. Widespread adoption of this technique could allow for significant health resource savings.

2:09 pm
Prognostic Factors and Survival Disparities in Right-Sided versus Left-Sided Colon Cancer
Simon Wilkins
Purpose: Right-sided colon cancer (RCC) and left-sided colon cancer (LCC) differ in features and outcomes because of variations in embryology, epidemiology, pathology, and prognosis. This study seeks to identify key factors impacting patient survival through Bayesian modelling. Methods: This study retrospectively analysed data entered into the Cabrini Monash colorectal neoplasia database, covering patients who underwent CRC surgery from January 2010 to December 2021. Patients over 18 years old with a diagnosis of CRC who had undergone surgery were included. Patient data on demographics, perioperative risks, treatment, mortality, and survival were collected. Statistical analyses were performed to identify factors affecting overall survival (OS) and relapse-free survival (RFS). Results: This study involved 2,475 patients, with 58.7% having RCC and 41.3% having LCC. RCC patients had a notably higher mortality rate, and their OS rates were slightly lower than those with LCC ($P<0.05$). When considering stages I-IV, RCC consistently exhibited worse OS and RFS than LCC ($P<0.05$). Other factors like age, BMI, ASA score, cancer stage, and comorbidities also demonstrated significant associations with OS and RFS. Poor and moderate differentiation, increased lymph node yield, and organ resection were linked to lower survival while receiving chemotherapy; higher BMI levels and elective surgery were associated with better survival (all $P<0.05$). Conclusion: Our study reveals key differences between RCC and LCC, emphasising the impact of factors like age, BMI, ASA score, cancer stage, and comorbidities on patient survival. LCC patients generally have better outcomes. These findings inform personalised treatment strategies for CRC patients.

2:18 pm

Outcomes of Robotic and Laparoscopic Right Hemicolectomy in the Novice Robotic Surgeon
Jeffrey Lau
Purpose: Patient outcomes comparing robotic and laparoscopic colonic surgery to date are mostly generated from expert robotic surgeons beyond their initial learning curve. With the rapid advent of robotic colorectal surgery in public teaching hospitals, the comparison of patient outcomes of those undergoing robotic and laparoscopic right hemicolectomies in teaching hospitals by robot naïve fellows is limited. Surgical outcomes from a large quaternary teaching hospital where fellows were within the first 0-20 cases of their robotic training are presented. Methodology: Medical records of all robotic and laparoscopic right hemicolectomies performed at Royal Brisbane and Women's Hospital since 2018 were reviewed. Primary outcomes were length of stay and operation time. Secondary outcomes were overall and cancer specific survival and complications. Results: 26 robotic and 103 laparoscopic right hemicolectomies were performed. Baseline demographics (age, sex, ASA) were similar between robotic and laparoscopic groups apart from body mass index (32.5 robot, 26.7 laparoscopic, p=0.03). The robotic cohort demonstrated a statistically significant lower length of stay (3.6 vs 4.7 days, p=0.009) but an increased in both anaesthesia and operating time (p=0.008). There were no statistically significant differences in survival to 5 years, nodal harvest, R0 resection rate, complication rate (ileus, anastomotic leak, infection, bleeding), readmissions, and conversion to open. Conclusion: Robotic right hemicolectomy provides an equivalent if not improved outcomes for patients compared to laparoscopic right hemicolectomies in the hands of robot naïve fellows operating under supervision. A robotic right hemicolectomy is a safe and feasible training operation.

2:27 pm
Do perioperative probiotics/synbiotics reduce postoperative infection rates following elective colorectal surgery? A systematic review and meta-analysis.
Claudia Paterson
Background: Postoperative infections are common in elective colorectal surgery (CRS). Perioperative probiotics/synbiotics have been investigated as a strategy to optimise the intestinal microbiota and reduce postoperative infections. The aim of this study was to conduct a systematic review and meta-analysis on the efficacy of perioperative probiotics/synbiotics on postoperative infection rates in elective CRS. Methods: Six databases were searched on 7th February 2023. Randomised controlled trials (RCTs) involving perioperative administration of probiotics/synbiotics among patients undergoing elective CRS for malignant and benign disease were included. The primary outcome was total postoperative infection rates within 30 days of surgery. Results: Twenty-eight RCTs, involving 2686 participants, demonstrated a reduction in total postoperative infections (RR 0.55, 95% CI 0.14 to 0.74, p < 0.0001), pneumonia (RR 0.43, 95% CI 0.29 to 0.66, p = 0.0001), UTIs (RR 0.54, 95% CI 0.32 to 0.94, p = 0.03), wound infections (RR 0.64, 95% CI 0.51 to 0.81, p = 0.0002) and line infections (RR 0.34, 95% CI 0.15 to 0.74, p = 0.007). Conclusion: Perioperative probiotics/synbiotics are associated with a reduction in total postoperative infection rates. Conclusions are limited by heterogeneity within the patient cohort and variability in intervention. Further investigation into optimal regimens is essential before clinical practice implementation.

2:36 pm
Persistent symptoms are common following Laparoscopic Ventral Mesh Rectopexy for Internal Rectal Prolapse
Jane Theodore
Purpose: The literature validates Laparoscopic Ventral Mesh Rectopexy (LVMR) for External Rectal Prolapse (ERP), however limited studies report on patient outcomes following LVMR for Internal Rectal Prolapse (IRP). This study assessed patient outcomes following LVMR for IRP. Methodology: A 10-year (2014-2024) retrospective cohort study was conducted on patients who underwent LVMR for IRP at a specialist pelvic floor centre. Primary endpoints assessed the incidence of recurrent IRP and prevalence of persistent symptoms (poor outcome). Secondary endpoints assessed clinical and operative risk factors that may contribute to a poor outcome (PO) versus a satisfactory outcome (SO). Results: Included were 80 patients (30 SO versus 50 PO) with a median age of 62 years. The majority were female (98%). Median follow-up was 17 months. Six patients (8%) had recurrent IRP with 83% undergoing surgery for symptomatic palpable or radiologically confirmed IRP. Two patients (3%) developed ERP. Persistent symptoms occurred in 63% of patients. There were no significant differences observed in the outcome groups for patient demographics (age and body mass index), preoperative symptom severity and quality of life scores, or operative technique (Douglasectomy, number of rectal sutures, sacral fixation method and colpopexy). There were significantly higher rates of anterior and middle compartment prolapse surgery in the SO versus PO group (33% versus 26%, p = 0.001). Other clinical factors, including previous rectal prolapse surgery, connective tissue disorders and anal sphincter injuries were non-significant. Conclusion: Persistent symptoms frequently occur following LVMR for IRP with a large proportion of patients requiring further surgery.

2:45 pm

Flavonoids and post haemorrhoidectomy recovery: a systematic review and meta-analysis
Renato Pitesa
Purpose: Haemorrhoidectomy is the gold standard for definitive treatment of high-grade symptomatic haemorrhoids but is often associated with substantial pain. This systematic review aims to explore the potential of flavonoids in alleviating the postoperative symptom burden, primarily pain, following excisional haemorrhoidectomy. Methodology: A systematic review of randomised control trials on the effect of flavonoids after excisional haemorrhoidectomy, published across the databases of PubMed, MEDLINE via Ovid, and Embase via Ovid from their inception up until December 2023. Data extraction was separated into primary and secondary outcomes to assess postoperative symptom burden. A meta-analysis was performed to synthesize data extracted on postoperative pain. Results: Ten articles were identified as part of this systematic review. The meta-analysis identified statistically significant decreases in pain at 7 of the 9 postoperative checkpoints in patients given flavonoids, with the most significant degree of pain relief achieved at postoperative days 7 ($p=0.0002$) and 14 ($p<0.0001$). Four, four and three articles respectively identified reductions in postoperative bleeding, pruritus, and tenesmus. Two studies reported an associated reduced length of stay, as well as reduced analgesic consumption with flavonoid use. Conclusion: Flavonoids show promise as a means of reducing pain, bleeding, pruritus, and tenesmus associated with excisional haemorrhoidectomy. Topical formulations of flavonoids are of particular interest given the context of the wounds treated and issues with bioavailability with oral dosing.

2:54 pm
'Days Alive and Out of Hospital' as a measure of hospital variation in 'capacity to rescue' following colorectal cancer resection
Cameron Wells
Background Hospital variation in postoperative mortality is driven by differences in 'rescue' from complications. However, mortality is a low-incidence outcome and limited as a quality indicator. We examined risk-adjusted hospital variation in 'days alive and out of hospital' (DAOH) for patients with and without complications after colorectal cancer resection. Methods All patients undergoing colorectal cancer resection in public hospitals in Aotearoa New Zealand from 2005-2020 were identified. The primary outcome was DAOH within 90 days of surgery. DHB variation in risk adjusted DAOH was examined for patients with and without postoperative complications (defined as reoperation, radiological intervention, medical complication, or death). Results A total of 26,227 patients were included, and 4.7% died within 90 days of surgery. The 90-day complication rate was 35%, most commonly reoperation (10.7%), acute kidney injury (8.4%), and pneumonia (8.0%). The median DAOH was 79 days (IQR 71-83, and varied significantly between patients with complications (median 68 days, IQR 48-77), and those without (median 81 days, IQR 78-84) ($p<0.001$). There was minimal DHB-level variation in median risk-adjusted DAOH, but variation was evident at the 25th and 10th centiles, driven primarily by differences in DAOH for patients with complications. Conclusion Wide hospital-level variation in DAOH exists for patients with complications following major colorectal cancer resection, reflecting variation in 'capacity to rescue', and supporting further quality improvement measures for this group. Relatively little hospital-level variation exists for patients without complications after colorectal surgery.

3:03 pm
Experience, outcomes and lessons learnt from the first 6 years at a peritoneal malignancy centre.
Cherry Koh
Introduction Cytoreductive surgery with hyperthermic intra-peritoneal chemotherapy (CRS+HIPEC) is a radical procedure that may offer cure in selected patients with peritoneal malignancy. Interest in CRS+HIPEC has grown as evidence surrounding its efficacy continues to build. To help overcome learning curves, new centres are commonly mentored by experienced surgeons from established centres. The purpose of this study is to review the experience of a CRS+HIPEC service at an Australian referral centre. Methods Consecutive patients planned for CRS+HIPEC from program inception in April 2017 to 2023 were retrospectively reviewed. All patients are prospectively recruited for a clinical and quality of life study. Patient demographics are tabulated. Categorical data was compared using X2 and continuous data compared using t-test. Results Over the study period, 448 procedures were performed on 423 patients. There were 239 females (56.5%). Median age at time of surgery was 56.0 (IQR 44.0-65.0). Indications for surgery were colorectal peritoneal metastases (194, 45.9%), high and low grade appendix tumours (94 (22.2%) and 67 (15.8%) respectively), ovarian cancers (30, 7.1%) and other cancer types. The 30-day mortality was 1.1%. For the primary CRS+HIPEC cohort, the median PCI was 12 (IQR 6-23). Complete cytoreduction was achieved in 183 (94.3%) patients with colorectal peritoneal metastases and 143 (88.9%) patients with appendiceal tumours. More complex procedures were undertaken as experience increased, including repeat CRS+HIPEC procedures from 2019 and laparoscopic assisted CRS+HIPEC procedures in 2023. Conclusion CRS+HIPEC can be offered safely with good outcomes in appropriately supported centres.

3:12 pm
P16 as a prognostic biomaker for survival outcomes after salvage surgery for anal squamous cell carcinoma
Wei Mou Lim
Background Evidence on salvage resection for localised ASCC after chemoradiotherapy (CRT) are often based on institutional case cohort studies with the biggest predictor of survival based on margin status. The impact of the biomarker p16 is unknown. The objective of this study is to examine prognostic factors associated with survival outcome after salvage surgery for relapsed ASCC. Methods Patients who underwent salvage surgery after radical CRT for ASCC were consecutively analysed at Peter MacCallum. Primary end points included OS, LRFS and DMFS. Survival analyses were estimated using the Kaplan Meir method. Cox Proportional Hazards Model was used to assess for independent prognostic factors. Results Overall, our study identified 73 patients who underwent curative salvage surgery for ASCC. The 5-year OS, LRFS and DMFS were 52%, 56% and 56% respectively, over a median follow up of 49 months. Median OS was 63 months. 39% of patients had local relapse after salvage surgery. Univariate analyses identified p16 negative status (HR 3.24, CI 1.04-10.11, p<0.05), positive margins (R+) (HR6.34, CI 2.99-13.63, p<0.001) and nodal positivity in the resection specimen (HR 4.75, CI 1.53-14.7, p<0.01) to be associated with worse OS. R+ was prognostic for inferior OS and LRFS on multivariate regression. p16 negative phenotype fared significantly worse in OS (Median OS: 13.7 months vs 76.7 months, HR 3.88, CI 0.63-24.04, p<0.01) and LRFS (Median LRFS: 8.5 months vs not reached, HR 3.48, CI 0.62- 19.65, p<0.05) utilising Log Rank comparison. Conclusion Our study has identified pathological risk features including p16 negative, nodal positivity and margin status in predicting outcomes of ASCC patients undergoing salvage surgery.

3:21 pm
Intracorporeal versus extracorporeal anastomoses for colon cancer patients undergoing right hemicolectomy: a long-term prospective Australasian neoplasia database study
Christopher Steen
Purpose Anastomoses formation during minimally invasive right hemicolectomy (RH) varies in Australasia, with many preferring the extracorporeal technique (ECA) despite increasing evidence for potentially improved postoperative outcomes with the intracorporeal technique (ICA). The aim of this study was to review a prospectively maintained colorectal neoplasia database since incorporating ICA in RH. Methodology From 2015-2023, 599 patients underwent RH for colon neoplasia. Those receiving ICA (n = 54) were compared to those receiving ECA (n = 545). RH technique used to construct ICA, laparoscopic (n = 31) versus robotic (n = 23), was also analysed. Length of hospital stay (LOS) was the primary outcome. Secondary outcomes included oversewing of anastomoses, lymph node harvest, conversion to open surgery, peri- and post operative outcomes and 30-day mortality. Results Age, sex and BMI were similar across groups. ICA patients had a significantly lower LOS (5 days) vs ECA (6 days, p=0.001). ICA patients were more likely to have their anastomoses completely oversewn (p<0.001). There were no significant differences between robotic ICA vs laparoscopic ICA. Two ICA patients (3.8%) vs four ECA patients (0.7%, p=0.034) experienced post operative haemorrhage (anastomotic bleed). No other differences were observed. Conclusion Minimally invasive RH ICA confers a significant advantage in decreasing LOS. There was a small increase in the anastomotic bleeding rate, but the events were infrequent. Moreover, the remaining outcomes recorded were similar across the ICA and ECA groups and overall RH ICA is a safe technique for colorectal neoplasia.

2:00 pm - 3:30 pm
RESEARCH PAPERS

Scientific Session - Younger Fellows, Quality & Safety in Surgical Practice - Dobson 3

2:00 pm
Academic opportunities in sustainable healthcare
Rennie Qin

2:10 pm
Initial Outcomes of a Surgical Ambulatory Care Pathway for Right Upper Quadrant Pain.
Yat Cheung Chung
Purpose/Introduction: Right upper quadrant (RUQ) pain is a common emergency general surgical presentation. Ambulatory Care Pathways (ACP) are described management strategies to reduce hospital bed pressure. It allows well patients presenting out of hours to be discharged from the emergency department, with a plan for re-presentation the following morning for further management. The aim of this study is to demonstrate that selected patients with RUQ pain can be managed via ACP to achieve shorter

inpatient length of stay (LOS) without higher morbidity or mortality. Methodology: Data on patients treated through the ACP for RUQ pain was prospectively collected from June 2021 to June 2022 and compared with a retrospective matched cohort of patients eligible for ACP management between June 2019 and 2020. Data collected included patient demographics, diagnosis, LOS and complications, including readmissions within 30 days. Results: Patients on the ACP had significantly shorter LOS (p< 0.001) with a median LOS of 1.0 (IQR 0.0-1.30) compared to retrospective group with a median of 2.0 (IQR 1.25- 2.75). There were no significant differences in patient demographics, theatre access, surgical complications, or readmissions within 30 days. Conclusion: Patients who presented out of hours with RUQ pain treated through the ACP had a shorter LOS without increased morbidity or mortality. ACP management of RUQ pain appears safe for patients who meet strict criteria.

2:20 pm
Reusable Surgical Headwear Have Lower Carbon Footprint and Matches Disposable Alternatives in Surgical Site Infection Incidence: A Systematic Review and Meta-Analysis
Sarah-Rose Fanshaw
Background: The responsibility of a surgeon extends beyond the operating table to encompass the environmental impact of their practices. This study aims to explore the environmental impact and surgical site infection risk of reusable surgical headwear compared to disposable headwear, reflecting the evolving role of surgeons in promoting sustainable healthcare practices. Methods: We conducted a systematic review and meta-analysis according to PRISMA guidelines, screening studies from MEDLINE, Embase, Scopus, Google Scholar, PubMed, and Cochrane Library until December 10, 2023. Studies were assessed for suitability, risk of bias, and heterogeneity using ROBINS-I, with results aggregated using RevMan for odds ratios (OR) and 95% confidence intervals (CI). Results: This systematic review included 9 studies, with a meta-analysis of 6 studies involving 45,708 procedural cases. There is no significant difference in SSI rates between reusable and disposable headwear (OR 0.79; 95% CI 0.59 – 1.07; P=0.13). Policy implementation did not significantly affect SSI rates (OR 1.21; 95% CI 0.85 – 1.73; P=0.30). Reusable options showed lower carbon footprint, ozone depletion, fossil fuel use, and freshwater toxicity. Conclusion: This study stands out as the first to collectively analyze data from 45,708 procedural cases demonstrating that reusable surgical headwear matches disposables in SSI prevention and offers substantial environmental advantages. These findings support a shift towards reusable headwear in healthcare, aligning patient safety with ecological responsibility. Such a change contributes to planetary health and highlights the surgeon's role in sustainable medical practices.

2:30 pm
The carbon footprint of transperineal prostate biopsy under local anaesthesia
Daniel Carson
Purpose: Climate change is the biggest global public health threat of the 21st century. Healthcare contributes 5% to global greenhouse gas emissions. Despite enthusiasm for sustainability in urology, there is little data on the environmental impact of urological practice. This study assessed the emissions associated with transperineal prostate biopsy (TPPB) performed in the clinic under local anaesthesia. Methodology: Emissions associated with TPPB at Tauranga Hospital (Aotearoa New Zealand) were estimated from electricity consumption, procurement of equipment and supplies, travel of staff and patients, waste disposal and sterilisation of linen. Local emissions coefficients were used to determine emissions in CO2 equivalents (kgCO2e). Results: TPPB was found to emit 70 kgCO2e per case, equivalent to 280 km of travel by car or an economy seat on a 90-minute flight from Auckland to Christchurch. The largest contributors were procurement of equipment (76%) and travel (23%). Electricity, waste disposal and linen sterilisation did not contribute significantly to emissions (0.4% each). 0.76 kg of waste was produced per case. Conclusion: This is the first study to evaluate the carbon footprint of a TPPB. Emissions may be mitigated by minimisation of equipment in standardised sets, adopting reusable equipment alternatives, and introducing outreach biopsy clinics to reduce patient travel distance. Reprocessing of single-use devices could also be of benefit. Adherence to pragmatic evidence-based guidelines for prostate cancer investigation may also reduce emissions from overdiagnosis and unnecessary biopsies. Further research is required to characterise the broader environmental impact of urological services.

2:40 pm
Navigating Data Privacy and Security in the Digital Age
Kreyen Ponen
The transition from paper-based medical record keeping to electronic health records (EHRs) has revolutionized healthcare delivery, offering streamlined workflows and improved accessibility to patient information. However, this shift brings forth a number of ethical challenges, particularly concerning data privacy and security in surgical practice. The evolution of medical record keeping from paper-based to a digital medium brings to light the balance between technological advancement and ethical responsibility.

While most think of data breaches at the local level, events such as the SingHealth cyberattack in 2018, have starkly highlighted the vulnerabilities of digital health systems at a national level. Demonstrating that patient data is not immune to cyber threats. The inconsistency between public and private healthcare systems further complicates matters. While large software providers like Epic or Cerner may offer more robust privacy and security features within public systems, the absence of standardisation of EHR in the private sector exposes patient data to heightened risks. In the evolving digital age in which patients & clinicians have a large presence on social media, whether this is for personal, business, or educational reasons, managing the privacy of patients data is a challenge. Hence, ensuring patient confidentiality and safeguarding sensitive health information are important ethical imperatives for clinicians. As custodians of patient trust, surgeons must navigate the complexities of data privacy regulations, implement stringent security protocols, and advocate for transparent communication regarding data breaches and cyber risks.

2:50 pm
Goodbye FFMN, lets choose EU2WU6 “Eat until 0200, Water until 0600” An audit of optimised fasting regime through a widespread education campaign.
Ashley Draper
Background: “Fast from midnight” (FFMN) has remained widely utilised due to traditional teaching despite Anaesthetic guidelines demonstrate widespread support for reduced pre-anaesthetic fasting protocols. This study implemented a widespread education campaign and subsequent audit of preoperative fasting reduction program for all surgery patients, at the Launceston General Hospital following, measuring effect on fasting times and intravenous fluid (IVF) usage. Methods: An education campaign was commenced to promote “Eat until 0200, Water until 0600” for optimised fasting. Adult patients who underwent preoperative fasting from October to December, 2023, were screened, with protocol uptake recorded. Further, total fasting times (TFT) and IVF use were recorded. Results: Uptake of EU2WU6 was recorded finding increased use of EU2WU6, with savings in fasting time, IV bag usage and overall hospital costs. The novel protocol was widely embraced by members of all levels of anaesthetic surgical and nursing hierarchy. Conclusion: This hospital based education campaign demonstrated positive impact of hospital education on tangible clinical practice outcomes. This offers incentive and evidence that invested medical staff, with allied health collaboration have potential to revolutionise fasting culture which can in turn optimise multiple measurable outcomes.

3:00 pm
A Patient-Centred Framework for Ethical Implementation of Robot-Assisted Surgery
Phillip Chao
Purpose: As robot-assisted surgery is disseminated worldwide, it is necessary to consider both technical and non-technical aspects of its implementation. Numerous ethical challenges have been ascribed to practising robot-assisted surgery. To truly deliver patient-centred care, patient perspectives should guide frameworks to support ethical implementation. Methodology: A literature review of ethical considerations and patient perspectives on robot-assisted surgery was conducted. We applied bioethical principles to develop an empirical framework to guide the ethical implementation of robot-assisted surgery. Results: For implementing robot-assisted surgery, the key ethical issues described are evidence, biases, informed consent, conflicts of interest, advertising, and access. Most patient-reported literature focused on patients' cognitive and emotional biases with heterogeneous patient perceptions. There is a mismatch between what patients want in informed consent and what they receive. Advertising affects patients' expectations and satisfaction with care. Conflicts of interest primarily function at an institutional level. There is inequity of access, which affects surgeons' portrayal. We propose research, self-reflection, understanding patient values, professionalism, managing expectations and advocacy as means to address ethical issues in implementing robot-assisted surgery. Conclusion: Empirical research on patient perspectives does not support all theoretical concerns regarding ethical issues in implementing robot-assisted surgery. The non-technical skills required for patient-centred implementation are already encompassed in the role of a surgeon.

3:10 pm
No need for a bed: Successes and challenges with day case Laparoscopic Cholecystectomy and Inguinal Hernia Repair
Megan Emonson
Purpose Australia is behind the global surgical community in the adoption of expanded day case surgery. Waitlists and system pressures demand the shift towards default day case models for laparoscopic cholecystectomy (LC) and inguinal hernia repair (IHR). This study evaluates the initial outcomes of implementing day surgery at a busy tertiary institution for these procedures by assessing success rates as well as patient reported outcomes (PROM). Methodology From March 2023, all patients undergoing LC and IHR at our institution were planned as day surgery unless they met exclusion criteria (Age>80, ASA>/=4, lack

of social support, anticoagulation requiring bridging enoxaparin). Data was prospectively recorded to assess success and readmissions. Patients were contacted on day 1 and 7 to assess patient reported outcomes with Quality of Recovery-15 (QoR-15) validated questionnaire. Results For the initial 5 months post implementation, 69% of IHRs were booked as day cases, with 84% of these successfully performed as day surgery. For LC, 74% were planned day surgery cases, with 55% achieving same day discharge. Meeting exclusion criteria and social reasons were the main reasons for booked overnight admission, whilst surgical drains (LC) was the main reason for conversion to overnight admission. PROM data was available for 34 patients, with high levels of recovery at day 1 (average QoR-15: 115, range 58-144) and expected improvement at day 7 (average QoR-15: 124, range 78-148). Conclusion Promising early success with deployment of day surgery pathways for LC and IHR is demonstrated at a tertiary hospital. Increasing outpatient support and minimising use of drains may further increase success of day case IHR and LC.

3:20 pm
If a surgical gown is reused in theatre, does it make a sterile statement?
Mingchun Liu
Purpose: The environmental footprint of the practice of 5000 surgeons in Australia is coming under increasing scrutiny. Over the last 30 years, reusable gowns and drapes have largely disappeared from use. Choosing between disposable and reusable surgical gowns involve considerations of sustainability, effectiveness against contaminants, and financial cost (1). There have been no studies assessing the individual impact of choosing reusable gowns above disposable. Method: A life cycle, environmental and financial cost analysis was performed to assess the impact of a single surgeon's use of reusable gowns over a four-year period. Results: During the four-year study period, 308 number of disposable gowns were not used. This resulted in the reduction of 28% in natural resource energy, a 29% reduction in global warming potential and a 98-100% reduction in solid waste generation when reusable gowns was chosen over their disposable counterparts. Additionally, choosing reusable gowns also poses a financial incentive, with a saving of over $500 during the four-year period. Conclusion: The use of reusable gowns in surgery results in financial and environmental savings. These savings need to be considered when choosing disposable or usable surgical gowns in an effect to reduce the cost and impact of surgery. 1. Vozzola, E., Overcash, M. and Griffing, E. (2018). Environmental considerations in the selection of isolation gowns: A life cycle assessment of reusable and disposable alternatives. American Journal of Infection Control, 46(8), 881–886. https://doi:10.1016/j.ajic.2018.02.002.

2:00 pm - 3:00 pm
RESEARCH PAPERS

Scientific Session - Rural Surgery - Bealey 2

2:00 pm
Obesity in Central Australia and the Barriers to Management
Antonio Barbaro
Obesity is a chronic health condition and is closely associated with Type 2 Diabetes Mellitus (T2DM). In Central Australia and Alice Springs Hospital clinicians have complex barriers when trying to prevent and treat these conditions. The aim of this presentation is to emphasise the lack of equity to dedicated bariatric services with a focus on multidisciplinary teams and bariatric surgery in Central Australia compared to metropolitan centres. Indigenous Australians make up 20.6% of the patients living in Alice Springs and 85.6% of the people living in the remote communities who are serviced by Alice Springs Hospital. In 2018, 76.8% of Australia's Indigenous population were found to be overweight or obese. In addition, 39.5% of the Indigenous Australians in Central Australia were found to suffer from T2DM. This is the highest rates recorded internationally. The high rates of obesity and T2DM have resulted in the highest rates of End-stage Renal Disease and lower limb amputations in Australia. Barriers which clinicians and patients face in Central Australia include a lack of allied health support, remote clients, associated costs with the Very Low Energy Diet (VLED) and no publicly funded bariatric surgery program in the Norther Territory. There are also cultural considerations when treating Indigenous Australians such as language barriers, poor health literacy, poverty, different ideas of food concepts and the involvement of family instead of the individual for health improvement strategies. This presentation further discusses these barriers and the impact they have on the patients in Central Australia.

2:10 pm
A qualitative review of the impact of human capacity and infrastructure upon rural general surgery within

Australia.
Jessica Paynter
Purpose: The provision of safe and equitable rural general surgical care is reliant upon a multidisciplinary team of healthcare practitioners and modern infrastructure. Due to this, a qualitative interview study was undertaken to determine the impact of human capacity and infrastructure upon Australian rural general surgery. Methodology: A qualitative interview study was undertaken from May 2022 – November 2023 using a semi-structured interview guide. The interviews were conducted by a single interviewer, and were conducted online with Australian rural general surgeons. Recruitment and interviewing was completed by the interviewer until an appropriately diverse group of participants had been interviewed, and no further new themes emerged. Results: Twenty-two rural Australian general surgeons were interviewed. Four key themes emerged. 1. Small hospital syndrome: This examines the challenges which smaller, rural hospitals face. It encompasses the culture that develops, the impact of an often absent or transient critical care team and "small town politics" which occurs. 2. The rural general surgeon identity: This reflects a broad and generalist skillset, that is motivated by a humanitarian and altruistic aspect, but requires large personal sacrifices. 3. The service providers: This identifies that rural general surgical teams are restricted in innovation, IT and access to imaging and pathology. 4. A social responsibility for surgery: This reflects a greater need for university engagement with rural surgical services, and a greater examination of metropolitan surgeons who "cream off the country." Conclusion: Four themes emerged which reflected the impact of human capacity and infrastructure upon Australian rural general surgery provision.

2:20 pm
Responsibilities, challenges and experience of remote telesurgery in acute Plastic Surgery trauma within the Antarctic Medicine Division
Wiktor Pilch
Surgeons engaged in telesurgery, particularly hand surgery, in Antarctica face a unique set of challenges and responsibilities. Operating in extreme environments, there is a responsibility to provide essential surgical care to individuals in remote locations. The harsh conditions of Antarctica amplify the significance of their role, as access to immediate medical assistance is severely limited. We discuss the challenges and experience of the Australian Antarctic Medical Division and the Hobart Plastic and Reconstructive Surgery Unit in providing this vital surgical service. Telesurgery in this context demands a meticulous approach due to the physical and technological constraints of the region. Surgeons must navigate through communication delays and potential technical glitches, emphasising the need for advanced telecommunication systems and robust contingency plans. Ensuring the success of tele-surgical interventions in Antarctica requires a fusion of surgical expertise and adaptability to unforeseen circumstances. Moreover, the responsibility extends beyond the surgical procedure itself. Surgeons must possess a comprehensive understanding of the unique medical challenges posed by the Antarctic environment, including frostbite, hypothermia, and other climate-related complications. Preparation and collaboration with interdisciplinary on-ground teams become paramount to address pre- and post-operative care effectively. The responsibility of the surgical team extends far beyond the operating room. Their duty encompasses technical proficiency, adaptability to extreme conditions, and a holistic approach to patient care in an environment where every decision is critical to the well-being of individuals in this remote and challenging locale.

2:30 pm
Impact of Pre-Operative Risk Assessment on Patients Undergoing Emergency Major Abdominal Surgery in a Regional Victorian Hospital
Jason Cox
Purpose Routine preoperative risk assessment (RPRA) using objective risk prediction tools may improve outcomes following Emergency Major Abdominal Surgery (EMAS). This project aims to identify whether the introduction of RPRA as standard of care for EMAS at a regional Victorian hospital has improved postoperative outcomes, improved postoperative Critical Care Unit (CCU) utilisation, and impacted pre-operative palliative decision making. Methodology A retrospective audit was performed of all adult general surgery patients who required EMAS at Bendigo Health between September 2017 and August 2022, including patients planned for surgery who were palliated up-front due to high perioperative risk. Patients requiring surgery for appendicitis, cholecystitis, trauma, and diagnostic laparoscopy were excluded. Outcomes were compared between patients undergoing surgery before and after the introduction of RPRA. Results 691 patients were included in the analysis. Median NELA score was 5. 2.6% of patients were palliated up-front and did not proceed to surgery. Amongst the 673 operative patients, 30-day mortality was 5.2%. Following introduction of RPRA, the operative subgroup saw a significant reduction in unplanned CCU admissions, from 9.14% to 3.48% (p=0.044). There was no significant change in rates of postoperative mortality, severe complications or planned CCU admissions. Conclusion Mortality and complication rates were not significantly reduced following introduction of RPRA. RPRA reduced rates of unplanned CCU

admission. RPRA appears useful in guidance of preoperative palliative decision making, however larger, prospective auditing is required to fully assess its utility in this context.

2:40 pm
Addressing inequalities of access to specialist surgical care through expansion of virtual services
Justin Hunt

2:00 pm - 3:30 pm
SCIENTIFIC SESSION

Scientific Session - Women in Surgery - Conway 4 - Conway 5

2:00 pm
The cost of equity
Deb Verran, Pringl Miller

2:20 pm
Is diversity the goal?
Rhea Liang

2:40 pm
Mentorship Programs for Women in Surgery: A Review of the Literature and Directions for Future Research
Emily Horan
Mentorship programs are essential for advancing women in surgery, addressing gender disparities, and promoting inclusivity in the field. This review explores the current landscape of such programs, outlines their benefits, and identifies areas for future development and research. Existing literature underscores mentorship's positive impact on women surgeons, enhancing their career development, job satisfaction, and overall well-being. Effective mentorship fosters skill development, strengthens leadership capabilities, and establishes supportive networks, ultimately contributing to increased diversity in surgical specialties and better patient care. Structured mentorship programs with clear objectives and well-defined expectations tend to be more successful. These programs should extend beyond clinical skills to encompass broader aspects like career guidance, work-life balance, and overcoming gender-specific challenges in surgery. Future research and development in women's surgery mentorship programs should focus on several key areas: outcome assessment; intersectionality; mentorship models; institutional support; mentor training; mentee empowerment; and mentor-mentee matching. This review underscores the vital role of mentorship programs in advancing women in surgery and offers insights for future research and program development. Implementing these recommendations will contribute to a more inclusive and equitable surgical community, benefiting both patients and the surgical profession as a whole.

2:50 pm
Women in Surgery: how can we champion female surgeons in innovation and entrepreneurship?
Aroosha Safari
Background: Despite the global advancements in gender equity, female surgeons remain under-represented within leadership, research, and entrepreneurship roles, reflecting the broader gender inequity within the scientific and corporate world. Female surgeons are leaders and creative problem solvers who continually adapt techniques, instruments, and clinical scenarios to optimize the outcomes for their patients. However , there remains a wide valley between the surgeon on the shop floor who understands the clinical treatment challenges and conceives an innovative idea, the engineers who can create the prototype of an instrument to address the challenge and the investors who can fund its development pathway towards a product that can benefit patients. Aim: We have two aims. First, to inform the surgical community of the existing roadblocks facing the female surgeon innovator. Second, to inspire aspiring and existing female surgeons to pursue opportunities in the medical technology and entrepreneurship world. Methods: We outline the challenges cited in the literature that prevent female surgeons from pursuing pathways within entrepreneurship and innovation . We then discuss strategies to overcome these challenges. Finally, we summarize a series of resources and pathways, such as Commonwealth Industry fellowships, that are available to female surgeons at various career stages, who want to work with or within the MedTech and entrepreneurship ecosystem. Conclusion: Female surgeons have the potential to become great innovators and entrepreneurs, as exemplified by some well-known names both in Australia and overseas.

3:00 pm
Discussion

2:00 pm - 3:30 pm
TECHNIQUES FOR COMPLEX HERNIA SURGERY

Scientific Session - General Surgery, Hernia Surgery - Dobson 1

2:00 pm
Update on hernia guidelines
Barbora East

2:30 pm
Management of the open abdomen
Rodney Jacobs
The Open abdomen (OA) is a temporary therapeutic measure employed in circumstances where the abdomen either cannot be closed or should not be closed. Clinically, it is used in such settings as abdominal catastrophe, acute fascial dehiscence, or emergent abdominal surgery in the setting of a pre-existing large ventral hernia. It is utilised after damage control surgery to mitigate against the development of abdominal hypertension and abdominal compartment syndrome. Historically, the viscera were managed with some form of temporary abdominal containment (TAC) until skin grafting and eventual repair of a planned ventral hernia. Static TAC methods resulted in low fascial closure rates, more complications, a high rate of enteroatmospheric fistula (EAF), higher mortality and more difficult hernias to repair with a high recurrence rate. These were found to be less effective than those techniques achieving early primary fascial closure. Dynamic closure methods combined with negative pressure wound therapy give the best results. The talk will present the current preferred techniques, including the role of Botulinum toxin and the use of intraoperative fascial traction (FasciotensTM).

2:45 pm
Management of the complex incisional hernia
Darren Tonkin

3:00 pm
Tips and tricks for inguinal hernia repair
Grant Coulter
this talk will cover tips and tricks learnt after 40 years of repairing inguinal hernias. with particular focus on indications , types of operations, and how to resolve various problems that may be encountered in routine open and laparoscopic inguinal hernia repairs The "balloon free "dissection technique for laparoscopic hernias will be demonstrated , and other ways to minimise costs

3:15 pm
Panel Discussion

2:00 pm - 3:30 pm
WHEN BONE MEETS BLOOD - THE WAR IN UKRAINE, TRAUMA AND IATROGENIC INJURIES

Scientific Session - Trauma Surgery, Vascular Surgery, General Surgery, Military Surgery, Orthopaedic Surgery - Dobson 2 - Dobson 4

2:00 pm
Massive Air Strike
Hnat Herych

2:20 pm
Vascular reconstruction following trauma. Tips and tricks

Jan Swinnen
The outcome from a given major vascular trauma (blunt or penetrating) for the patient and the target organ / limb is very variable and depends on many different factors. It is my experience that Vascular Reconstruction (as opposed to simple ligation) is needed in only a minority of cases. When a patient sustains a major vascular injury, the following are possible outcomes: 1. Patient dies immediately or at site of injury (common); 2. Patient does not reach hospital alive (common); 3. Patient reaches hospital alive, but the limb is already dead (common); 4. Patient reaches hospital alive and the limb is not critically ischemic – urgent or delayed reconstruction probably not needed (common); 5. Patient reaches hospital alive and the limb is alive but critically ischemic – urgent reconstruction (uncommon). Management sequence consists of: a. Hemorrhage control (pressure, tourniquet etc) b. Manage other life threatening problems (airway, chest etc) c. Is the limb salvageable? Is the limb critically ischemic? Is vascular repair possible?, advisable? d. Decide on reconstruct or ligate; e. Fasciotomy Factors affecting the need for reconstruction: 1. Artery injured: Some arteries ~never need reconstruction (eg isolated radial, subclavian), some always (eg popliteal, CFA) & some dependent on other factors. 2. Are the collaterals damaged? What is the size & complexity of the wound? 3. Is the limb critically ischemic? 4. General state of the patient & hospital (multitrauma – mass casualty) Reconstruction options: a. Primary repair of hole or partial division artery (occasional) b. End – End repair (uncommon) c. Long Saphenous Vein interposition graft (workhorse) d. LSV bypass e. Temporary shunt for delayed repair

2:30 pm
Approaches to the subclavian artery and other difficult trauma points of access
Patrick Reilly

2:40 pm
The dilemma of the paediatric pink, pulseless hand with supracondylar humerus fracture: a literature review
Myrna Ishak
Purpose: To assess the consensus on diagnosis, management and follow-up of brachial artery injuries accompanying supracondylar humerus fractures in paediatric patients. Methodology: A literature search was conducted on PubMed/MEDLINE using terms “brachial artery injury”, “supracondylar humerus fracture” and “trauma”. This yielded 44 results, of which 25 were included. Exclusion criteria comprised publications authored in a language other than English, those with publication date preceding 10 years ago, and article non-relevance on individual appraisal of title and abstract. Results: 25 articles were studied, comprising 1 systematic review, 10 retrospective cohort studies, 8 case reports, 5 case series, and 1 review paper. Diagnostic and therapeutic approaches amongst authors varied, however there were recurring themes. Patients with persisting pale, pulseless hands following fracture reduction and fixation should undergo emergent operative exploration and potential revascularisation of the brachial artery. In cases of the distally perfused but pulseless limb, investigators generally favoured non-operative management with inpatient neurovascular observation for 48-72 hours. Assessment of upper extremity perfusion differed considerably amongst centres; some relied solely on physical examination, while others utilised ancillary pulse oximetry, duplex ultrasonography or intraoperative digital subtraction angiography to assess for arterial injury and collateral vasculature. Follow-up regimens lacked consistency and suffered substantial patient attrition. Conclusion: There remains significant heterogeneity within the literature regarding optimal management and follow-up of these patients, necessitating more high-quality evidence.

2:48 pm
Understanding compartment syndrome
Jan Swinnen
Compartment Syndrome (CS) can occur in many parts of the body – limbs, abdomen – this talk will focus on the limbs esp. the calf. CS has many different causes – ischemia, fracture, blast injury etc. CS in the leg should be thought of in 2 scenarios: 1. Established CS / Advanced CS with muscle necrosis, nerve damage; 2. Anticipated / possible CS Diagnosis & Management of these 2 is very different. 1. Diagnosis in Established / Advanced CS is usually straightforward, but comes “too late”. A full, open, 4 compartment fasciotomy should be performed +/- debride dead muscle +/- “bootlace” closure of the skin. An alternative is resection of the middle 1/3 of fibula thru a single incision. 2. In anticipated / possible CS, diagnosis is difficult, signs & symptoms vague & fluctuating & patient may be in a critical state complicating assessment. In this situation, fasciotomy should be performed very early & liberally, but the closed, 3 compartment fasciotomy should be used. Why the “closed” 3 compartment fasciotomy? a. Compared to the 4 compartment fasciotomy, it is minimally invasive, leaving 2 small (5cm) closed or open wounds, with minimal dissection, soft tissue damage, infective or healing problems. b. Being minimally invasive, it can & will be used liberally, frequently & early in all situations where the development of CS is considered, avoiding the occasional catastrophic Advanced CS. c. It avoids the complicated & unreliable “monitoring” of the development of CS in at risk limbs. Its main weakness is failure to open the Deep Posterior Compartment. However, this is affected

uncommonly, esp. compared to Anterior Compartment. The closed fracture scenario can be approached in similar fashion, particularly by using prophylactic gypsotomy.

2:58 pm
Amputation, re-amputation and prosthesis. Experience 1 year in Ukraine
Hnat Herych

3:18 pm
Discussion

---

09 May 2024

4:00 pm - 5:30 pm
ABDOMINAL WALL ANATOMY AND RECONSTRUCTION

Scientific Session - Plastic & Reconstructive Surgery, Hernia Surgery - Dobson 1

4:00 pm
How often does clinically significant rectus diastasis arise? A prospective cohort study of Australian women from early pregnancy to a year post-partum
Nicola Dean, Nicola Dean

4:10 pm
Abdominal wall reconstruction, including autologous options and allotransplantation
Henk Giele
This is an educational talk covering the principles and options for abdominal wall reconstruction, plus Prof. Giele's personal approach to the most common forms of abdominal wall defect, plus rationalisation of these choices to aid others in building their own protocols. there is a focus on the use of autologous tissues, and the talk finishes with an example of abdominal wall allotransplantation.

4:30 pm
Health-related quality of life outcomes of abdominoplasty for post-partum rectus diastasis
Siobhan Fitzpatrick

4:50 pm
Complex hernia repair
Danette Wright

5:10 pm
Panel Discussion

4:00 pm - 5:30 pm
ADVANCING PAIN MANAGEMENT IN SURGICAL PRACTICE: INNOVATIONS, PERSPECTIVES AND CLINICAL IMPACT

Scientific Session - Pain Medicine & Surgery - Bealey 4

4:00 pm
Surgery for musculoskeletal pain
Ian Harris

4:30 pm
Deep learning for muscle segmentation in spinal surgery for pain
Rachel Park
Purpose: Computational modelling by use of neural networks was performed to assess morphology and

composition of paraspinal muscles in individuals for spinal surgery to better assist with decision making in management. Methodology: Pre-operative T2-weighted MRI axial images from 27 participants who had either lumbar microdiscectomy (n=14) or lateral lumbar interbody fusion (n=13) were obtained. Convolutional neural network models were trained for segmentation of the multifidus, erector spinae, and psoas major muscles on each side. Cross-sectional volume and fatty infiltration (%) measures of each paraspinal muscle were calculated and analysed. Results: There was an increased fatty infiltration in all paraspinal muscles in participants who were to undergo lateral lumbar interbody fusion, compared to participants for microdiscectomy. In both groups, multifidus muscle had much higher fatty infiltration (36%), followed by erector spinae muscle (30%), then psoas major muscle (12%). Conclusion: Computational modelling showed a global increase in fatty infiltration specific to the muscles producing extensor torque on the lumbar spine in individuals with low back pain. This was accentuated in advanced spinal disease requiring a lateral lumbar interbody fusion. Further study, including predictive modelling, is warranted to assess correlation between composition of paraspinal muscles to post-operative outcome, and hence to enhance surgical decision making in individuals with low back pain.

4:40 pm
Tolerability of transperineal prostate biopsy under local anaesthetic using pre-emptive over-the-counter analgesia: an interventional study in patients with abnormal clinical prostate findings at the Sydney Adventist Hospital
Shelley Wang
Objective: Transperineal prostate (TP) biopsy is the key diagnostic tool for evaluating prostate cancer and may be feasible under local anaesthetic (LA) alone. However, concerns about its tolerability encourage use of a multimodal analgesia approach. Pre-emptive over-the-counter analgesia with LA may provide a simple and low-risk option. The objective of this study was to investigate the effects of over-the-counter analgesia on TP biopsies conducted under LA. Methods: This interventional single-centre study investigated 160 participants who undertook a TP biopsy under LA, with and without pre-emptive analgesia (paracetamol 1g and ibuprofen 400mg). Pain tolerability was measured using a visual analogue scale (VAS) at three procedural points (probe insertion, LA infiltration, biopsy); an overall average VAS score was subsequently calculated. Abstracted secondary variables include patient details (age, prostate size, PSA level) and biopsy details (number of cores, volume of LA used) and preferability for LA use in future TP biopsies. Inferential statistical analysis was performed using Wilcoxon's Rank Sum non-parametric test, Pearson's test of correlation, and Pearson's Chi-squared test. Results: The groups were comparable in age, prostate size, and PSA level. Median VAS scores were consistently lower in the intervention cohort, but without statistical significance. Higher volume of LA was associated with lower overall VAS (p=0.03). LA was strongly preferred over GA for hypothetical future TP biopsies in both cohorts. Conclusions: Pre-emptive analgesia does not significantly improve tolerability of TP biopsy under LA. Our study substantiates evidence that TP biopsy is generally well-tolerated under LA and preferred over GA.

4:50 pm
How do surgeons change practice?
Ian Harris

4:00 pm - 5:30 pm
COLON CANCER

Scientific Session - General Surgery, Colorectal Surgery - Auditorium 4

4:00 pm
CME in right hemi
Kim-Chi Phan-Thien

4:12 pm
Pre-operative chemotherapy (FOXTROT) in colon cancer
Cherry Koh

4:24 pm
Current indications and outcomes from peritonectomy
Peter Hewett

4:36 pm
Early onset colorectal cancer: where are we now?
Benjamin Cribb

4:48 pm
NET: the role of prophylactic surgical resection of proximal lymphadenopathy in metastatic disease
Jamish Gandhi

5:00 pm
PMP
Tim Underwood

5:12 pm
Panel Discussion

4:00 pm - 5:30 pm
FIX AND FLAP

Scientific Session - Orthopaedic Surgery - Conway 1

4:00 pm
Fix and Flap: The Middlemore Experience
Rob Orec

4:45 pm
Fix and Flap: The Middlemore Experience
David Morgan Jones

4:00 pm - 5:30 pm
RATIONING BY STEALTH OR BY INTENT

Scientific Session - Surgical Leaders, Trainees Association, Medico-Legal, Younger Fellows, Senior Surgeons Program - Conway 3

4:00 pm
Fairness
Saxon Connor

4:40 pm
Rationing, expectations, and rights
Vanessa Caldwell

4:55 pm
Better understanding planned care provision
Derek Sherwood

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Paediatric Surgery - Dobson 3

4:00 pm
Newborn Infant Parasympathetic Evaluation (NIPE) monitor for detecting intraoperative nociceptive stimuli in children younger than 2 years under general anaesthesia.

Mahesh Sakthivel
Purpose: The Newborn Infant Parasympathetic Evaluation (NIPE) monitor is an objective, non-invasive tool for the assessment of pain in children <2 years-of-age. The aim of this study was to evaluate the ability of the NIPE monitor to detect pain in neonates and infants during surgery under general anaesthesia. Methodology: This prospective observational study included neonates and infants undergoing elective inguinal hernia repair under general anaesthesia with a caudal block. The NIPE monitor was connected to the electrocardiogram monitor with continuous monitoring performed intraoperatively. The NIPE index was recorded prior to and during a 120 second interval following a nociceptive event. The nociceptive events evaluated were endotracheal intubation, venous cannulation, caudal block, and skin incision. The NIPE index ranges from 0-100, where lower values indicate greater levels of pain. P values <0.05 were considered significant. Data are reported as mean [95% CI]. Results: There were 40 infants recruited and a total of 115 events were analysed. All nociceptive stimuli caused a decrease in the NIPE index, indicating an overall ability to detect pain. The NIPE index decreased by 26.1% [9.9 - 42.3%] after intubation (p<0.0001), decreased by 12.1% [4.5 - 19.7%] after venous cannulation (p=0.004), decreased by 19.4% [10.9 - 27.9%] after caudal block (p<0.0001), and decreased by 18.3% [9.5 - 27.1%] after skin incision (p=0.0002). Conclusion: NIPE monitor is effective in detecting intraoperative painful stimuli under general anaesthesia. Further research is required to investigate other clinical contexts in which this monitor can be practically used.

4:05 pm
Detailed analysis of intraoperative pain stimuli using the Newborn Infant Parasympathetic Evaluation (NIPE) monitor in infants undergoing open inguinal hernia repair under general anaesthesia with caudal block.
Mahesh Sakthivel
Purpose: The Newborn Infant Parasympathetic Evaluation (NIPE) monitor is an objective, non-invasive tool for the assessment of pain in children <2 years-of-age. The aim of this study was to perform an objective and detailed analysis of the intraoperative pain in infants undergoing open inguinal hernia repair (OIHR) using the NIPE monitor. Methodology: This prospective observational study included neonates and infants undergoing elective OIHR under general anaesthesia with a caudal block. The NIPE monitor was connected to the electrocardiogram monitor with continuous monitoring performed intraoperatively. The NIPE index was recorded at different intraoperative steps and the median NIPE (NIPEm) index was calculated for the entire procedure; NIPE index ranges from 0-100, lower values indicate greater levels of pain, values <50 indicate severe pain. Data reported as median [range]. Results: There were 30 infants recruited. NIPEm was 77.00 [46.00-91.50], indicating an overall level of comfort throughout the procedure for all patients. Similarly, no intraoperative steps had a NIPEm of <50: skin incision (64.00 [29.00-89.00]), external oblique incision (79.00 [22.00-86.00]), spermatic cord delivery (70.00 [32.00-95.00]), hernial sac isolation (64.00 [35.00-97.00]), sac suturing (78.00 [49.00-90.00], testis repositioning (74.50 [33.00-93.00]), external oblique closure (73.00 [50.00-92.00]), and skin closure (73.00 [40.00-92.00]). Conclusion: General anaesthesia with caudal block during OIHR appears to provide adequate cover for pain. The most painful steps identified during the procedure were skin incision, spermatic cord delivery and hernial sac isolation. These findings could be used to guide the intraoperative pain management by the anaesthetic team.

4:10 pm
The racial disparity of orchidopexy for undescended testes: A five-year review in a tertiary hospital
Brooke Marsters
Purpose: The international guidelines recommend orchidopexy for undescended testes (UDT) no later than 18 months of age. We aim to analyse UTD care at Waikato Hospital with a focus on demographic factors. Methodology: A retrospective review of prospectively collected data of patients undergoing orchidopexy for UDT from 2018-2023 was conducted. Baseline demography, the age and date at first referral, first outpatient review and surgery were recorded. The time between referral and clinic visit (T1), clinic and surgery (T2) were calculated with comparisons between ethnicities and NZ deprivation index. Median and interquartile range are presented for easy comparison with previous studies. Mann-Whitney test was used for statistical analysis. A p value ≤0.05 was considered significant. The Clinical Audit Support Unit approval number was 4438P. Results: A total of 232 children underwent orchidopexy, 50% of which were Māori (23.9% in Waikato population). The median age at referral was 6.7 months (1.8-18.7) and surgery 17.9 months (13.2-30.2). The median T1 was 2.5 months (1.5-4.0) and T2, 6.2 months (3.3-10.2). At all time points Māori had an increased median compared to non-Māori although not statistically significant (p=0.68 for T1, p=0.91 for T2). The median age at surgery was 19.1 months (13.8-35.0) for Māori compared to 16.9 (12.6-25.6) for non-Māori (p=0.05). Age at surgery between deprivation categories was not statistically significant (p=0.25). Conclusion: Māori have a high incidence of UDT comparatively. The median age of orchidopexy is within guidelines, but Māori receive surgery past the recommended timeframes calling for urgent action for improvement.

4:15 pm
Icing on the chest: intercostal nerve cryoablation for the Nuss procedure

Julia Simons

Purpose The Nuss procedure, also known as Minimally Invasive Repair of Pectus Excavatum (MIRPE), is recognised to cause high levels of postoperative pain. Intercostal nerve cryoablation during MIRPE is a technique that results in extended analgesia for 3-6 months after surgery. We describe our early experience with cryoablation in MIRPE in two hospitals in Brisbane. Methodology Retrospective chart reviews were conducted of patients who have undergone cryoablation for MIRPE since its introduction in Brisbane and patients who underwent MIRPE without cryoablation immediately before its introduction. Oral morphine equivalents were calculated for opiate medications administered in hospital. The two cohorts were compared using unpaired t-tests. Results 17 patients (average age 15.8 yrs) underwent MIRPE with cryoablation and were compared to 17 who underwent MIRPE without cryoablation therapy (average age 15.7 yrs). Cryoablation significantly reduced the length of stay-average 3 days compared to 5.4 days in patients without cryoablation ($p<0.05$). Cryoablation also significantly reduced inpatient opiate use- average oral morphine equivalent 110mg in patients who received cryoablation compared to 489mg in those who did not ($p<0.05$). None of the patients who underwent cryoablation were discharged on long-acting opiates compared to 81 % of patients with no ablation. Conclusion Intercostal cryoablation for MIRPE significantly reduces postoperative pain and duration of hospitalisation. Our presentation will describe our results and the technique of cryoablation, including the use of adjunctive local anaesthetic intercostal nerve blocks.

4:20 pm

Prevalence and Association of Congenital Heart Disease with Hirschsprung's disease

Thawanrat Charoenchantra

https://docs.google.com/file/d/1IFML03g5586_Gas4S9IN_0VFHMCGv41j/edit?usp=docslist_api&filetype=msword

4:25 pm

Pre-referral ultrasound for disorders of testicular descent – ongoing, still unnecessary

Grace Boyd

Purpose Evidence-based guidelines do not recommend imaging in cryptorchidism, but anecdotally most referrals include an ultrasound report. We aimed to assess the frequency, utility and burden of imaging in children referred with presumptive disorders of testicular descent, and to assess trends over a 7-year period. Methodology A prospective cohort study of children referred to the Queensland Children's Hospital for anomalies of testicular descent between 2015-17 and 2023-24. Data were collected regarding demographics, referral details, imaging performed, and surgical diagnosis. Results 268 children were recruited. Ultrasound frequency has not significantly changed over time (72.80% 2015-17, 63.64% 2023-24). Currently, 17.58% of families are charged, and 31.87% need to take time off work, for the ultrasound. This is a significant increase from the 2015-17 cohort. Parents report concern and anxiety, and find it traumatic for their child. The majority (65.73%) have physiologically normal testes, while 4.90% and 23.08% were diagnosed with bilateral or unilateral cryptorchidism respectively, and 6.29% had other diagnoses. Ultrasound was concordant with the surgical diagnosis in 25.00% (2015-17) and 30.69% (2023-24). Ultrasound did not contribute to diagnosis or management in any patient. Conclusion Despite numerous international clinical guidelines, most children seen in our clinic for disorders of testicular descent continue to undergo ultrasound prior to referral, and this has not significantly reduced over time. We have shown such ultrasounds do not provide utility, and in an era of value-based care, do not provide value for cost. We recommend avoiding their routine use for presumptive disorders of testicular descent.

4:30 pm

Management of oesophageal atresia: a survey of the Australia and New Zealand Association of Paediatric Surgeons (ANZAPS)

Alicia Miers

Purpose: Inspired by the vibrant panel discussion at the 2022 ANZAPS Meeting, this survey aims to collate the current practices in the management of oesophageal atresia. Methods: Online survey sent to ANZAPS members. Results: A total of 50 members responded. Operative planning and approach amongst respondents revealed that routinely; 82% perform an LBO, 94% perform an extra-pleural approach and 76% divide the azygous vein. Surveying post operative practices, 90% leave a trans-anastomotic tube and 50% leave an intercostal catheter. Post operative contrast studies are utilised by 82%. For management of an acute life-threatening event, in the absence of a stricture and with severe tracheomalacia, 74% would proceed with aortopexy and 8% with fundoplication. For management of long gap oesophageal atresia, management tends to be centre dependent with 56% of responders preferring to feed and grow with a plan for delayed primary anastomosis. 26% reported that external traction is preferred and 4% reported using internal traction. 57% of responders reported that surveillance is performed by a Paediatric Surgeon and 36% are seen by a multidisciplinary clinic. 40% reported that routine endoscopic surveillance is performed according to local protocols, MDT opinion or gastroenterology guidelines. Conclusion: This survey

documents the current variation surrounding the management of oesophageal atresia among ANZAPS members. Many practices vary including the use of chest drains. For cases of long gap oesophageal atresia, the approach remains centre dependent. This provides opportunity to discuss current evidence, may guide prospective multi-centre data collection and facilitate further research.

4:35 pm
Hairy hors d'oeuvres: multiple management strategies for paediatric trichobezoars in Western Australia
Amelia Davis
Purpose Trichobezoars are an uncommon presentation, and can be a challenge to identify and manage in the paediatric population. Trichobezoars insidiously increase in size and as a consequence typically present late. Surgical removal through conventional laparotomy is the gold standard in management. Minimally invasive options for extraction are limited in both suitability and operative times. In this case series, we report five cases of successful minimally invasive management in Western Australia. Methodology A retrospective search was performed for the past five years (from 2019-present). Five cases were identified and medical records were reviewed. Data was analysed for demographics, presenting symptoms, investigations, interventions and complications. Results The five female children were aged between 7-11 years old with gastric and/or intestinal trichobezoar confirmed on imaging. The most common presenting complaint was abdominal pain. Three patients had an underlying psychiatric diagnosis. Three patients received dissolution therapy with Coca-Cola, one of which showed complete resolution on endoscopy. Two cases were successfully retrieved endoscopically, and two cases that were deemed unsuitable for gastroscopic removal were retrieved via mini-laparotomy through the assistance of an Alexis O retractor. All cases received optimal multidisciplinary input and had not represented at the time of the data collection. Conclusion Trichobezoars should be considered as a differential diagnosis for patients presenting with abdominal pain and a palpable abdominal mass. Minimally invasive approaches for the initial management are safe and effective. Long term multidisciplinary input is essential to avoid recurrence.

4:40 pm
A 10-year analysis of the effects of probiotic supplementation for the prevention of necrotising enterocolitis (NEC) in preterm babies.
Zhe Lee
Purpose: We aimed to appraise the effects of the use of probiotics on the incidence and severity of NEC and to compare the results of different probiotic preparations in a large population of premature infants admitted to an Australian Level 6B Neonatal Intensive Care Unit (NICU) over a 10-year period. Method: Retrospective review of clinical outcome of preterm babies <32 weeks gestational age over a 10-year period before the use of probiotics (Group A) or receiving 2 different strains of probiotics [L. acidophilus + B. bifidum (Group B) or L. acidophilus + B. infantis + B. bifidum (Group C)]. Data are reported as number of cases (%), mean ±SD and analysed using GraphPad Prism 10. Results: There were 1256 (57% males) babies in Group A, 623 (49.7% males) in Group B and 297 (48.8%) in Group C. Group A had a significant higher gestational age [28.77 ± 2.25 in Group A vs. 28.23 ± 2.26 in Group B vs. 27.82 ± 2.16 in Group C ($p<0.0001$)] and birth weight (gr) [1290 ± 435.6 in Group A vs. 1134 ± 361.1 in Group B vs. 1033 ± 283.9 in Group C ($p<0.0001$)]. Total NEC cases were 34 (2.7) in Group A vs. 19 (3.0) in Group B vs. 9 (3.0) in Group C ($p = 0.67$). Patient requiring surgery for NEC were 26 (76.5) in Group A vs. 14 (73.7) in Group B vs. 7 (77.7) in Group C ($p = 0.98$). NEC related deaths were 8 (23.5) in Group A vs. 6 (31.5) in group B vs. 0 (0) in Group C ($p = 0.3$). Conclusion: In our NICU, the use of 2 different probiotics formulations in a population of low gestational age and birth weight neonates is associated with incidence or severity of NEC comparable to higher gestational age and birth weight neonates.

4:45 pm
Incidence of Small Bowel Obstruction Post-Appendicectomy: 10-year experience.
Jaspreet Singh
Purpose: Small Bowel Obstruction (SBO) is a possible complication after appendicectomy. If not settled with conservative management, it may require surgical intervention (SI). We reviewed the incidence of SBO requiring SI at our centre. Methodology: A 10-year retrospective analysis was undertaken of patients aged <15 years undergoing appendicectomy at Starship Hospital from 1st January 2013 to 31st December 2022. All patients managed with appendicectomy were identified and those with initial length of stay (LOS) of more than 5 days or requiring readmission were analyzed further. Only patients requiring SI for their SBO were included in the final analysis. Results: A total of 2653 patients were managed with appendicectomy at Starship Hospital during the study period; 661 patients were identified with LOS >5 days or readmission. Surgical management of SBO was required in 26 patients (0.98%). This group had a median age of 8.5 years (2-14 years) and a male predominance (76.9%). Appendicectomy was performed laparoscopically in 22 (84.6%) and open in 4 patients (15.4%). Average follow-up was 7.4 years (2.3-10.5 years). Twenty-three patients (88.5%) had perforated appendicitis with 19 patients (73%) having contamination not limited to

right iliac fossa. Average length of stay at index admission was 16.7 days (2.2-37.1 days) with 18 patients (69%) requiring SI during this admission. Median time between appendicectomy and SI for SBO was 9 days (3 days-6.3 years). Operative findings were adhesions (24, [92%]) and adhesions with infection/abscess (2, [8%]). Conclusion: The incidence of SBO requiring SI post-appendicectomy is low at 1%. It has a strong association with perforated appendicitis and can lead to prolonged length of stay.

4:50 pm
The impact decreasing acute burn reepithelialisation time by 22% has on morbidity utilising Negative Pressure Wound Therapy: a retrospective, modelled paper
Emma Lumsden
Introduction Negative Pressure Wound Therapy (NPWT) has been introduced as an acute burn care adjunct, with research suggesting that application at initial debridement may decrease time to re-epithelialisation by 22%. The implication of burn stratification via depth and the overall clinical significance is unknown. Therefore, the aim of this study was to assess the effect reducing time to re-epithelialisation by 22% has on therapeutic morbidity when stratified via depth. Methods This Australian, singe site, retrospective cohort study from a quaternary paediatric burns unit used burns registry data from 2014 – 2015; the final year before NPWT was introduced into acute burn care. The primary outcome was the effect reducing time to re-epithelialisation by 22% had on scar clinic referral, stratified via depth. Results 803 participants were included. Mean time to re-epithelialisation was 21.3 days (95% CI 18.92 – 23.71) for deep dermal partial thickness burns (DPT). 212 patients (26.4%) were referred to scar clinic, 63.2% were DPT. The odds ratio of being referred to scar clinic increased by 7.6 (4.4 – 13.1; p <0.001) for each increase in burn depth. At day 21, there was a 67.19% (58.82 – 75.57) probability of being referred to scar outpatient clinic (SOC). When reducing the time to re-epithelialisation by 22%, this same burn would heal on day 16 and have a 44.92% (35.59 – 54.25%) probability of being referred to SOC – a reduction of 22.27%. Conclusion From these data, the addition of NPWT as an acute burn care adjunct is likely clinically significant in deep partial thickness burns as it significantly decreases the probability of scar clinic referral.

4:55 pm
Protocol for a Feasibility, Acceptability and Safety study of the PICO™ Device (Negative Pressure Wound Therapy) in Acute Paediatric Burns
Emma Lumsden
Introduction: Negative Pressure Wound Therapy (NPWT) in acute burn care may decrease the time to re-epithelialisation by more than 20%. Despite this, the perceived burden of use have so far limited the use of NPWT. This might be minimised by utilising the small, ultra-portable, single-use NPWT device PICO™ as opposed to larger devices. This research primarily assessed the feasibility, acceptability and safety of PICO™ in paediatric burns. Secondary outcomes include time to re-epithelialisation, pain, itch, cost and scar formation. Methods and analysis: This single site, prospective, pilot randomised control trial was conducted in an Australian quaternary paediatric burns centre. Participants were aged ≤16-years, otherwise well and managed within 24-hours of sustaining a burn that fits beneath a PICO™ dressing. Thirty participants were randomised to one of three groups: Mepitel® and ACTICOAT™, Mepitel®, ACTICOAT™ and PICO™; and Mepitel®, ACTICOAT™ Flex and PICO™. Patient outcomes were recorded at each dressing change to assess efficacy and safety outcomes until three months post burn wound re-epithelialisation. Surveys, randomisation and data storage were undertaken via online platforms and physical data storage collated at the Centre for Children's Health Research, Brisbane, Australia. Analysis was done using Stata statistical software. Results: Data has finished being collated and will be presented at the RACS scientific forum. Ethics and Registration: Ethics has been obtained from Queensland Health and Griffith Human Research Ethics committees including a site-specific approval. Registration is with the Australian and New Zealand Clinical Trials Registry (ACTRN12622000009718). A grant was provided by Smith & Nephew which partially funded the trial.

5:00 pm
Biliary atresia outcomes in New Zealand: A 21 year retrospective cohort study
Andrew Hobson
Purpose: Biliary atresia (BA) is a progressive, obstructive cholangiopathy manifesting during early infancy. BA disproportionately affects Māori and Pacific Peoples, with previous studies reporting better outcomes among these groups. This study explores this and other predictors of outcome, in the largest study of BA in New Zealand (NZ) to date. Methodology: A retrospective cohort study including all patients with BA, born in NZ from 2002-2022. Cox proportional hazards regression was utilised to determine transplant-free survival (TFS) by sex, ethnicity, era (first 10 years versus last 11) and age at Kasai portoenterostomy (KP). Kaplan-Meier survival analysis was performed to demonstrate overall (OS) and TFS. Results: 148 patients (54% female) with BA were born in NZ during the study period. 60 patients (41%) were Māori, 28 (19%) Pacific Peoples and 18 (12%) Asian. OS and TFS at 5 years were 85% and 44% respectively. 5-year TFS was significantly better in

Asian (63%), Māori (49%), Pacific Peoples (43%) compared to European (28%) patients. Median age at KP was 49 (European), 57 (Asian) and 62 days (Māori and Pacific Peoples). Sex and era were not associated with a difference in TFS. Conclusion: Outcomes for patients with BA in New Zealand are equivalent to other major centres. Māori, Pacific and Asian patients demonstrate better outcomes in spite of older age at KP. The reason for this remains unclear but provides further evidence for a difference in disease phenotype depending on ethnicity. This is an area that continues to be actively explored by this research unit.

5:05 pm
Paediatric Laparoscopic Pyeloplasty; A single centre experience
Gayathri Panabokke

5:10 pm
Subdiaphragmatic extra-lobar sequestrations - a minimalistic approach to management
Holly Campbell
Subdiaphragmatic extra-lobar sequestrations (ELS) are uncommon entities that are increasingly detected on antenatal imaging. Resection of these lesions has historically been performed, primarily due to the differential of congenital neuroblastoma. There is growing evidence to suggest that these lesions spontaneously involute in early life and that there are sonographic features that enable ELS to be distinguished from more concerning differentials. Our observational cohort study follows such lesions in five patients at Sydney Children's Hospital. All patients were referred by the MFM unit. Demographic information and relevant imaging characteristics such as size, laterality, identification of a feeding vessel, echogenicity and calcifications were considered. Those with features consistent with ELS and normal catecholamines were reviewed with serial USS' in the immediate post-natal period and then at 3–6-month intervals. All lesions were detected in the second trimester, 4/5 were left sided and 4/5 had the specific USS finding of a direct feeding vessel. USS surveillance is ongoing for all patients, with a duration ranging from 16 months – 3 years. All lesions have demonstrated a significant decrease in size or else complete spontaneous resolution during surveillance. No patients have proceeded to cross-sectional imaging or operative intervention. Our small cohort demonstrates that antenatally diagnosed subdiaphragmatic ELS' can be safely observed with USS alone. This avoids the need for cross-sectional imaging and surgical resection. These single-centre, prospective results are promising, but should form the basis of larger trials to make more robust conclusions and management protocols.

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Vascular Surgery - Dobson 4

4:00 pm
Enhancing Patient Education on Asymptomatic Carotid Artery Disease through AI-Generated Videos: A Survey-Based Study
Mei Ping Melody Koo

4:08 pm
Implementation of Topical Wound Oxygen Therapy for Non-Healing Ulceration in Vascular Surgical Patients: Initial Experience and Results
Angus Pegler
Purpose Cyclical topical wound oxygen therapy can significantly increase the likelihood of healing and reduce time to healing for chronic diabetic foot ulcers. Topical oxygen therapy was recently introduced in the Vascular Surgery Department at the Sunshine Coast University Hospital using the Topical Wound Oxygen Therapy (TWO2) device (AOTI) as an adjunctive therapy for non-healing ulceration following unsuccessful conservative management. This project outlines our experience with implementation of topical oxygen therapy and reports initial outcomes of this novel treatment. Methodology All patients who have undergone topical oxygen therapy since implementation in June 2023 were included. Data regarding wound size and characteristics were collected prospectively throughout the treatment course. Patients were continued on therapy until the wound was healed, or therapy was ceased due to skin grafting, poor tolerance or adherence. Results Ten patients received topical wound oxygen therapy since June 2023. Five patients were treated for diabetic foot ulceration (50%), four (40%) for radiation induced ulceration, and one (10%) for other causes. Four patients (40%) achieved wound healing, three (30%) underwent treatment until biodegradable temporising matrix or split thickness skin grafting occurred, two (20%) ceased treatment due

to poor tolerance, and one (10%) is ongoing. Challenges to implementation included staff education, cost, and logistic considerations as treatment is currently only available for daily outpatient clinic use. Conclusion Implementation of topical wound oxygen therapy is feasible and treatment is well tolerated. Early results suggest a positive effect in patients with previously non-healing ulcers.

4:16 pm
A 10-Year Retrospective comparative Analysis of Elective and Emergency Endovascular Aneurysm Repair in Australia and New Zealand:
Angus Kennedy
Purpose Endovascular Aneurysm Repair (EVAR) is now the most common technique for Abdominal Aortic Aneurysm (AAA) repair. This study seeks to investigate demographic, technical and outcome differences between elective and ruptured AAA treated with EVAR in Australia and New Zealand. Methodology Data was collected from the Australian Vascular Audit for all patients undergoing an EVAR for aortic aneurysm repair between 2011 – 2021. Demographic, technical and outcome data was collected and patients were stratified by the indication for operation. Operations for false, mycotic and occluded aneurysms were excluded. Results The mortality rate for ruptured EVAR was markedly higher at 13.9% (95%CI 11.5-16.3%) compared to 1.4% in the elective cohort (95%CI 0.6-1.6%). There was a significant difference in aneurysm size with an average diameter of 7.1cm in the EVAR group (95%CI 6.96-7.24%), compared to 5.7cm in the elective group (95%CI 57.4-57.7%). There was a significant difference in frequency of suprarenal fixation use, with 89% in ruptured EVARs (95%CI 86.6-91.4%) compared to 84.6% in the elective cohort (95%CI 86.6-91.4%). Patients undertaking an elective EVAR demonstrated a lower prevalence of renal failure (Cr>150), 7.2% (95%CI 6.8-7.6%) compared to those with ruptured aneurysms 17.2%, (95%CI 14.5-19.8%). Conclusion EVAR is a well-established technique for the treatment of both elective and ruptured AAA. This study found a difference in use of suprarenal aortic fixation between elective and ruptured aneurysm patients treated with EVAR. This may be driven by clinician preference, device familiarity, or perceived technical advantage, however the uncertain impact upon patient outcomes of this difference warrants further research.

4:24 pm
Effect of Telmisartan on the Peak Wall Stress and Peak Wall Rupture Index of Small Abdominal Aortic Aneurysms: An Exploratory Analysis of the TEDY Trial
Tejas Singh

4:32 pm
Blue light photobiomodulation: a novel adjunct in the management of chronic wounds
Myrna Ishak

4:40 pm
Outcomes of Multi-Disciplinary Pre-Operative Risk Assessment in High-Risk Patients undergoing Vascular Surgery
Angus Pegler
Purpose Patients undergoing vascular surgery are often frail. Frailty estimates by validated risk calculators can inform operative planning and recovery. In this study, high-risk patients are assessed by surgical, anaesthetic and critical care clinicians via the Quality Focused Interventions for the Relief of Symptoms Team (QFIRST). This project reports outcomes of QFIRST for patients undergoing vascular surgery and correlates risk assessment with post-operative outcomes. Methodology Patients were identified from a prospective database since QFIRST inception in 2018. Peri-operative risk calculators used included the Edmonton Frailty Scale, WHODAS, ASA, MET and NSQIP. Risk estimates were compared against post-operative complications, length of stay and mortality. Results 50 patients underwent QFIRST assessment. 32 endovascular aortic (64%), 8 open aortic (16%), 8 infra-inguinal (16%) and 2 extra-anatomical bypass (4%) procedures were proposed. 30 (60%) patients underwent the planned procedure, 5 (10%) a modified procedure and 15 (30%) did not proceed. Patients who proceeded to surgery had lower risk scores: Edmonton Frailty Scale (1.8 vs 2.9), WHODAS (23.5% vs 29.8%), ASA (3.2 vs 3.6), MET (3.3 vs 2.8) and NSQIP (serious complication 18.9% vs 23.4%, length of stay 5.0 vs 5.2 days, death 4.5% vs 7.3%). Post-operative medical and surgical complications occurred in 18.2% and 19.0% of patients, in-hospital mortality was 5.7% and mean length of stay 7.5 days. Conclusion Multi-disciplinary assessment of patients planned for vascular surgery is feasible and results in changes to management. Peri-operative risk is high in this population and may be under-estimated by common risk calculators, mandating collaborative evaluation.

4:48 pm
Use of Biodegradable Temporising Matrix for Diabetic and Non-Diabetic Lower Limb Ulceration in the Vascular Surgery Population
Angus Pegler

Purpose Biodegradable Temporising Matrix (BTM) is a synthetic dermal substitute which has been used primarily in burns and reconstructive surgery. Use of BTM for diabetic foot ulceration has only recently been described in the literature, and is previously limited to small cohort studies. BTM facilitates wound coverage to prevent infection, limits pain with dressings, and prepares wounds or prevents the requirement for skin grafts or flaps. This project reports the experience of BTM use in Vascular Surgical patients for both diabetic and non-diabetic lower limb ulceration at the Sunshine Coast University Hospital. Methodology All patients who underwent application of BTM at the Sunshine Coast University Hospital were included. Patients were prospectively collated and outcomes retrospectively reviewed to assess success of grafting and wound healing. BTM was applied following revascularisation in patients who required arterial intervention. Following BTM application, patients routinely underwent negative pressure wound therapy dressings as an inpatient, followed by close outpatient wound monitoring. Further applications of BTM and split thickness skin grafting were performed as required. Results Nine patients underwent application of BTM for lower limb wounds. Five (56%) were diabetic foot ulcers and four (44%) from other causes. Two (22%) patients required subsequent layering of further pieces of BTM to fill the wound defect. Three (33%) patients progressed to have subsequent split thickness skin grafting performed. No grafts failed or required removal. Conclusion Based on our experience, application of BTM is safe and effective for the management of both diabetic and non-diabetic ulceration in the Vascular Surgery population.

4:56 pm
D-TAD: Determining the fate of the distal aorta after Type A Dissection
Myrna Ishak

5:04 pm
Association of chronic venous disease with major adverse cardiovascular events
Tejas Singh

5:12 pm
Starting Low but Going Slow: Poor Uptake of Low-Dose Rivaroxaban Usage in Patients with Cardiovascular Disease in Australia
Angus Pegler
Purpose Low-dose rivaroxaban in combination with aspirin has been shown in RCTs to reduce cardiovascular events in stable cardiovascular disease and prevent limb events in peripheral artery disease after revascularisation. Rivaroxaban 2.5mg was first listed on the pharmaceutical benefits scheme (PBS) in Australia on 1 December 2020. This study reviews the uptake of low-dose rivaroxaban in Australia and compares this with prescribing habits in England. Methodology Annual PBS prescriptions of low-dose rivaroxaban were extracted from publicly available Australian PBS Item Reports since 1 December 2020. Australian Bureau of Statistics population data was used to calculate prescriptions per 1000 persons. Annual prescriptions by General Practitioners in England were extracted using publicly available National Health Service (NHS) data and prescriptions per 1000 persons calculated. Results Total PBS prescriptions of low-dose rivaroxaban in Australia increased from 7,683 in 2021 to 20,079 in 2023. Prescriptions per person were highest in New South Wales, followed by Queensland then Western Australia. Since 2021, almost twice as many prescriptions of low-dose rivaroxaban have been filled per person in England compared with Australia (3.1 vs 1.7 per 1000 persons), including in 2023 (1.2 vs 0.8 per 1000 persons). Conclusion There is robust evidence supporting the use of low-dose rivaroxaban, however uptake in Australia appears lower compared with England, despite similar population demographics. Although prescription rates are increasing, ongoing work is required to ensure clinician education, cost, and PBS eligibility are not barriers to provision of best medical therapy in patients with cardiovascular disease.

5:20 pm
The CROCS-BKA Multi-Centre Study – Comparison of Rigid Or Conventional Stump dressings following Below-the-Knee Amputation
Yahsze Teo
Purpose Below-knee amputation (BKA) has a devastating impact on function, however there is limited evidence to guide which dressing choice promotes better healing and prosthetic use. This multi-centre study (in collaboration with NZ Artificial Limb Service) addresses the question: do rigid removable dressings (RRDs) alter short-term surgical and long-term functional outcomes following BKA? Methodology A retrospective review of all BKAs performed in four tertiary centres between 2009-2022 was carried out. Exclusion criteria were previous contralateral amputations, a subsequent amputation within 12 months, and paediatric cases. The surgical outcomes were length of hospital stay (LOS), return to theatre (RTT) and mortality. The functional outcomes were time to initial assessment (a proxy for stump healing) and prosthetic fitting, and mobility and quality of life scores. Results Of the total 759 cases, 43.9% received a RRD, 44.4% were fitted with a soft dressing, and for 11.7% dressing type was not recorded. There were no

differences in LOS, RTT or mortality between the groups. Functional outcome data from Wellington demonstrated the rigid group had significantly shorter times to initial assessment (median difference 19 days, p=0.004) and prosthetic fitting (median difference 17 days, p=0.04). Multi-centre functional data collection is ongoing. Conclusion Time to initial assessment and prosthetic fitting was significantly shorter in the RRD group. These findings are consistent with international literature and guidelines. This demonstrates the need for increased use of RRDs to accelerate healing post-BKA. While a randomised controlled trial may not hold equipoise, this data should be correlated with other multi-centre studies.

4:00 pm - 5:30 pm
RESEARCH PAPERS

Scientific Session - Trauma Surgery - Conway 2

Presentations marked with an asterisk (*) are eligible to be considered for the Damian McMahon paper prize.

4:00 pm
Geriatric trauma trends in Tasmania: Importance of a multidisciplinary approach
Dafydd Jones
Purpose: Australia has an ageing population. In 2020, 16% of the population was above the age of 65. This has seen an increasing number of geriatric trauma presentations. Geriatric patients pose significant challenges in trauma settings, due to comorbidities, frailty, and age-related changes in physiology and shock responses. When compared to their younger counterparts, mortality rates, length of stay and discharge to rehabilitation wards are higher in geriatric trauma patients. Methodology: This was a single institution retrospective study with data collected from the Tasmanian Trauma Registry. This study included patients admitted between 01/4/2020 to 31/3/2023 >65 years old and had an injury severity score >12 or died secondary to sustained injuries. Results: There were 272 patients included in this study, with a median age of 78 and mortality rate of 19%. There were 1955 individual injuries records. Falls constituted majority of these traumas, occurring in 74% of patients. The mechanism with the highest mortality rate was fall from standing height (31%, p<0.05). Among all patients, 20% required surgical intervention, 19% were admitted to ICU and 40% were not discharged to their usual place of residence. Conclusion: These findings demonstrate the significant morbidity and mortality associated with geriatric trauma. It highlights how a simple mechanism such as a fall from standing height carries a significant risk of death to this patient population. The number of geriatric trauma presentations will continue to grow as the population ages, which will require increased resource allocation, improved triage protocols and a multidisciplinary approach. This highlights the importance of integrating geriatric perioperative services within trauma teams.

4:10 pm
An Epidemiological and Clinical Study of Traumatic Brain Injury in Papua New Guinea Managed by General Surgeons in Two Provincial Hospitals
Ian Umo
Purpose Traumatic brain injury is a global health priority. The burden is highest in the western pacific region, and it is estimated that two-thirds of patients in rural Papua New Guinea die before hospital admission. Managing traumatic brain injury is further compounded by limited investigations and neurosurgery services. The aim of this study was to investigate the potential factors of mortality amongst patients with moderate and severe head injuries. Methodology A retrospective cohort study was conducted from two provincial hospitals in Papua New Guinea. Potential factors of mortality were investigated by using logistic regression analysis. There was a significant odds of reduced mortality in patients with vomiting and headache (OR 0.16, 95% CI 0.04–0.69, p = 0.0132), reactive pupils (OR 0.02, 95% CI 0.00–0.17, p = 0.0005), a higher GCS (OR 0.77 for every 1 point increase in GCS, 95% CI 0.63–0.95, p= 0.0147), and length of hospital stay (OR 0.84 per 1 day increase, 95% CI 0.72–0.98, p=0.0258). In contrast, mortality was increased with the use of mannitol (OR 9.17, 95% CI 1.34–62.71, p=0.0239), hypoxia (OR 20.91, 95% CI 4.00–109.37, p = 0.0003), presence of complications (OR 5.25, 95% CI 1.41–19.51, p = 0.0133), and admission to KPH compared with APH (OR 4.71, 95% CI 1.25–17.75, p = 0.0222). Conclusion This study highlights potential factors associated with traumatic brain injury mortality in rural Papua New Guinea. The findings can help direct policy makers, assist in public health awareness, and improve surgical research, care, and management for patients with traumatic brain injury in rural Papua New Guinea.

4:20 pm

Falls at home: the quiet giant of trauma admission
Grant Christey
Purpose: To describe the epidemiology and costs of trauma admissions to the Te Manawa Taki Trauma System (TMT) hospitals in New Zealand following falls at home. Methodology: A retrospective, observational study was conducted using data from the TMT trauma registry to identify patients of all ages who presented following falls at home from 2012 to 2022. Incidence of Fall Related Injuries (FRIs) occurred at home, Injury Severity Score (ISS), injury characteristics, and direct cost to TMT facilities are reported by demographic factors. Results: A total of 13,142 events were identified in the TMT trauma system following falls at home, representing 51.5% of the total falls-related trauma events. Majority (94.4%) were classified as non-major trauma (ISS<13). The annual incidence of FRIs increased steadily from 902 events in 2012 to 1456 in 2022. Across all age groups, falls from <1m remained the most common height of fall. There were two distinctive age band incidence peaks: ≤9 years and 60+ years. During 2022, trauma events due to falls at home cost approximately NZ$24.3 million directly to TMT facilities. The average cost per event was NZ$ 9,792. Conclusion: Falls at home represent the single most common cause of trauma admission in the TMT region of Aotearoa, creating significant burden on the health system, individuals, and communities. Further exploration of causative factors and high risk activities will allow targeting of prevention strategies and interventions.

4:30 pm
*Under diagnosis and under treatment of Post Traumatic Stress Disorder post major trauma in New Zealand.
Nikita Quinn
Purpose: Previous research has shown the psychological effects of trauma are often under recognised and under treated, however there is a lack of research analysing this in the New Zealand context. This study aimed to look at under diagnosis and under treatment of PTSD amongst major trauma patients in New Zealand. Methodology: Participants were recruited from the NZ Major Trauma Registry (NZ MTR; Injury Severity Score ≥12). Eligible participants were mailed a questionnaire containing a series of self reported 5 point rating scales that assesses DSM-V symptoms of PTSD. Baseline characteristics and demographic data were obtained from the MTR. Results: Among 210 patients with major trauma (24.9% response rate), 38 (18.1%) were classified as having PTSD. Of these, 19 (50%) had not been assessed or formally diagnosed. 10 patients (26.3%), had received a formal diagnosis of PTSD. Of the 38 patients classified with PTSD, 9 (23.7%) were absolutely or quite certain they had no new mental illness since the trauma, 9 (23.7%) thought there was a roughly 50:50 chance they had a new mental illness, and 10 (26.3%) were very certain they had a new mental illness but had not been formally diagnosed. 18.4% (7) patients with PTSD received pharmacotherapy only; 10.5% talk therapy only; and 21% received both. 50% of the trauma patients with PTSD had not received any form of treatment. Conclusion: Many people who develop PTSD following trauma fail to receive appropriate assessment, diagnosis or treatment. Further work is needed to ensure adequate systems are in place to allow identification and treatment of patients who develop PTSD following a major trauma.

4:40 pm
Prevalence and predictors of post-traumatic stress disorder following major trauma in New Zealand
Daniel Jemberie
Purpose: Post-traumatic stress disorder (PTSD) is a known potential sequel to physical trauma. However, there is disagreement regarding the predictors of this condition. Furthermore, PTSD in trauma patients has seldom been studied in New Zealand. This study aimed to measure the prevalence and predictors of PTSD amongst hospitalised trauma patients in New Zealand. Methodology: Participants were recruited from the NZ Major Trauma Registry (NZ-MTR; Injury Severity Score [ISS] ≥ 12). Eligible participants were mailed a questionnaire containing a series of self-reported 5-point rating scales that assesses DSM-V symptoms of PTSD. Baseline characteristics and demographic data were obtained from the NZ-MTR. Correlation coefficients and t-tests were used for determining predictors of PTSD scores. Results: Among 210 patients with major trauma (24.9% response rate), 38 (18.1%) were classed as having PTSD. Symptoms of PTSD were positively associated with the presence of anxiety ($r = 0.80$, <.001) and depression ($r = 0.75$, $p < 0.001$); higher ISS ($r = 0.17$, $p = 0.02$), and years since injury ($r = 0.16$, $p = 0.02$). PTSD was negatively associated with older age ($r = -0.24$, $p < 0.001$), and perceived social support ($r = -0.46$, < 0.001). There was an insignificant trend towards females scoring higher than males (18.15 vs 14.35, $p = 0.10$). Conclusion: High rates of PTSD exist in patients following major trauma in NZ. Patients with pre-existing anxiety and depression, a higher ISS, younger age, more time since injury, and who lack social support, are at a higher risk of developing PTSD.

4:50 pm
*5-year retrospective audit on electronic scooter trauma presentations in a major metropolitan hospital in Brisbane Queensland: Is being green worth your spleen?

Madeleine Kelly

Introduction: Electric scooter (e-scooter) use is promoted as an environmentally friendly mode of transportation, and is rapidly increasing around the world. In 2018, Brisbane was the first Australian city to introduce an e-scooter sharing scheme. This study reviews the patterns of injury of e-scooter trauma. Methods: A retrospective study of electronic scooter trauma that presented to the Royal Brisbane and Women's Hospital in the study period (Nov 2018 - Jan 2023) was conducted. Data recorded included basic patient demographics, event details, substance use, and helmet use. Injuries identified, interventions performed and complication rate post interventions were documented and subgroup analysis performed. Results: 429 patients (96 female, 333 male) identified in the selected data period. The majority of patients were in the age group of 25-34. Alcohol use was recorded in 29.1% and helmet use was documented in 47.8% of presentations. Helmets were protective against any head injury with an odds ratio (OR) of 0.3 (p <0.001). The protective effect for significant head injury requiring intervention did not reach significance, OR 1.2 (p=0.82). Half (48%) of patients presented after hours (between 7pm and 7am). 33% of incidences occurred above the legal speed limit (25km/hr). There were 768 injuries identified across the 429 patients and 84 patients (19.6%) required surgical intervention. Conclusion: E-scooter is an increasingly popular mode of transportation but is not without its risks. Emerging e-scooter trauma places a significant burden been placed on the health system.

5:00 pm

*Outcomes in patients with rib fractures following implementation of the RIB-IMPROVE rib fracture guideline.

Matthew McGuinness

Purpose The multidisciplinary RIB-IMPROVE rib fracture guideline was implement at Whangārei Hospital with the aim of improving the care of patients with rib fractures. The aim of this study was to assess the impact of this on the management and outcomes of patients. Methodology A single centre retrospective audit was performed comparing patients with rib fractures pre and post the implementation of the RIB-IMPROVE guideline. The primary outcome of interest was the pneumonia rate. Patients were excluded with an abbreviated injury scale score >2 in the head or abdomen. Binomial logistic regression for pneumonia using clinically plausible risk adjustment variables as fixed effects was performed. Results 418 patients were identified; 241 in the pre-guideline and 177 in the post-guideline group. There was no difference in age, gender, ethnicity, number of rib fractures, injury severity score (ISS), or local anaesthetic block placement. The pneumonia rate was 13% vs 7% comparing the pre- and post-guideline groups, respectively. After adjustment for age, gender and injury severity score the relative risk of developing pneumonia was 0.52 comparing the post- with the pre-guideline group (p 0.038). Although a trend towards improvement was seen in all secondary outcomes there was no statistical difference in the LOS, 30-day readmission rate or 30-day mortality rate. Conclusion: This study found that after implementation of the RIB-IMPROVE guideline at Whangārei hospital the risk of pneumonia was decreased by almost half. A trend towards improvement was seen in all secondary outcomes. This study highlights the effectiveness of a multidiscipline guideline in the management of patients with rib fractures.

5:10 pm

*A retrospective review of code crimson patients at a level 1 trauma centre in Sydney, Australia

Aleksandra Polikarpova

5:20 pm

*Epidemiology of Myocardial Injury in Trauma Patients

Jett Karolewski

Purpose: To describe the epidemiology of myocardial injury in trauma patients. Method: A one-year retrospective study ending on 31/08/2023 was conducted at a Level-1 Trauma Centre. All adult trauma resuscitation patients with elevated troponin serum concentration were included. Patient demographics, medical history, mechanism, injury severity, laboratory data, cardiac investigations, LOS, ICU admission and mortality were collected. Patients were categorised into three groups based on the timing of their Troponin peak (Group1:<12hours; Group2:12-24hours; Group3:>24hours). Results: From 1408 admissions, 97(7%) patients (Age:56±24yrs; Male:71%; ISS:18,IQR25; LOS:14±16; ICU:66%; Mortality:16.5%) had elevated Troponin. Group1 (n=37; Age:48±23; Male:76%; ISS:9 IQR18; LOS:14±21; ICU:51%; Mortaliy:5.4%); Group2 (n=32; Age:51±24; Male:78%; ISS:27,IQR41; LOS:11±6; ICU:84.3%; Mortaliy:25%) and Group3 (n=28; Age:71±19; Male:57%; ISS:19,IQR38; LOS:17±15; ICU:64%; Mortaliy:21.4%). 64% of patients had thoracic injuries, which was consistent among the three groups. Group 3 had most frequent ECG (61%) and echocardiography (29%) findings. Conclusion: Troponin elevation occurs in 7% of all trauma admissions and it identifies the seriously injured high-risk cohort. The timing of the maximum Troponin concentration seems to describe three distinct phenotypes. "Hyperacute", "Subacute" with severe polytrauma and tissue injury requiring major resource utilisation and associated with increased mortality rate, and "Late" characterised by ECG and ECHO changes

suggesting primary ischaemic cardiac pathology rather than blunt trauma and hyperinflammation related as in Acute and Subacute phenotypes.

4:00 pm - 5:30 pm
SCIENTIFIC SESSION

Scientific Session - Surgical History, Military Surgery - Bealey 5

4:00 pm
Wounded! Front -line Medical Care in the First World War
Shelley McKellar
During the First World War, frontline Allied medical care contributed to an astounding success rate for wounded and sick soldiers who received treatment. Staged medical treatment near the fighting lines significantly reduced the number of wounded soldiers dying from bleeding, shock, and infection after enduring horrific body damage due to bullet fire, shrapnel damage and later mustard gas exposure. Lice, rats, and overall unhygienic conditions at the front led to bouts of trench fever, trench foot and other sicknesses that warranted attention to their prevention and treatment. This presentation examines frontline WWI medical care towards 'saving' Captain Allison, a physician assigned to the Canadian Army Medical Corps (CAMC), from historical obscurity and why a German WWI medical kit now resides in a Canadian university medical artifact collection.

4:15 pm
Military Physical Orthopaedics. Rehabilitation of WW1 Injured New Zealand soldiers.
Jean Claude Theis
The massive casualties of World War 1 were unparalleled but the rehabilitation of injured soldiers of the New Zealand Expeditionary Force created a significant challenge during the war and in the long term after their return home. Rehabilitation involved secondary orthopaedic surgery, physical and occupational rehabilitation, orthotics and prosthetics as well as vocational retraining. Military Hospitals were opened after the war in New Zealand where the birth of orthopaedic surgery took place alongside musculoskeletal physical therapy. This lecture was inspired by a book entitled "Military Physical Orthopaedics" written in 1918 by Arthur Stanley Herbert who was the Principal Medical Officer of the Rotorua Orthopaedic Hospital and Government Balneologist.

4:30 pm
College founder- Sir Hugh Acland: War- RACS
Richard Acland

4:45 pm
Doug Jolly – Spanish Civil War surgeon and his influence on Allied military medical planning in WWII
David Lowe

5:00 pm
Military origins of Surgical Triage
Bethany Matthews
Military surgeons have played a fundamental role in the development of current civilian surgical triage. Recognition of patients requiring urgent medical intervention and the allocation of resources is an integral part of providing efficient and effective patient care. The first triage system was developed by Baron Dominique-Jean Larrey (1766-1842), a French army surgeon, who rose to the position of surgeon-in-chief of Napolean's Grande Armée (French Imperial Army). He dictated that those "dangerously wounded receive attention first without regard to rank or distinction". In 1846 British Naval Surgeon John Wilson advocated to first treat those requiring immediate intervention in which intervention is likely to be successful. Stemming from the concept of the greatest good for the greatest number. The first civilian triage system was published in 1964 and with military triage concepts of assessment and intervention remaining in surgical triage today. Emergency surgery accounts for up to 45% of the surgery delivered in public hospitals. To accommodate an increase in surgical demand, limited resources, and growing patient expectations continued civilian surgical triage evolution is necessary. Emergency surgery access guidelines in Australia are state based, but consistently schedule according to patient clinical situation, and potential ramifications of delay, without influence by perceived or actual availability of resources. Reflection on the military origins of surgical triage helps inform the principles of current triage systems, given the similarities to resource

limitations. This will help avoid forgetting lessons learnt and assisting in ongoing improvement of civilian emergency surgical triage systems.

5:10 pm
Battlefield Surgery during the American Civil War 1861-1865: unfairly maligned?
Giles Moseley
The Civil War was fought across more than 10,000 battle sites and is regarding as an extremely dark period of American History. Over 2% of the US population died in the conflict, with estimated fatalities ranging from 620,000-752,000 (1). Surgical care during the conflict is commonly viewed as being rudimentary at best and barbaric at worst, the conflict being somewhat unfairly known for surgery without anaesthesia and vast numbers of unnecessary amputations. Although the conflict did indeed lead to large numbers of disabled veterans, this was largely due to high numbers of non-fatal extremity injuries inflicted by the low velocity muskets that were used by combatants, rather than a lack of skill by the treating surgeons. Indeed, only the most senior of the Union surgeons were allowed to amputate. During the year after the war ended, the state of Mississippi spent 20% of its budget on artificial limbs for veterans (2). The surgeons were practicising in an era before germ theory was established, before sterile techniques and antisepsis were known, with very few effective medications, and often operating for 48-72 hours without sleep. Despite this, many advances were made by dedicated clinicians on both sides of the conflict, including public health measures, disease prevention, medical evacuation, creation of specialty hospitals, safe use of anaesthesia, performance of rudimentary Neurosurgery, development of techniques of arterial ligation and the first performance of plastic surgery.. 1. Hacker JD. A census-based count of civil War dead. Civ War Hist. 2011;57:307-348 2. Foote S. The Civil War: A Narrative. Vol. 3. New York: Random House;1958. Pp 1040-1041

5:20 pm
“Did you ever meet Draffin in your travels?”
Colin Barber
Captain David Draffin was an Irish otolaryngologist whose name comes up in Australasian ORL operating theatres on an almost daily basis. In 1951, he published an article in the British Medical Journal describing an instrument for supporting the mouth gag used in tonsillectomy; a ubiquitous ORL procedure. The simple, effective, and highly useful instrument is still in use today. His life however was anything but simple. Born in 1917, he studied at Queen’s University, Belfast and graduated in 1939 just in time for the start of World War II. He enlisted in the Royal Army Military Corps (RAMC) but was unfortunately captured early in the war. He was notorious for his numerous but unsuccessful attempted escapes, from multiple German prisoner of war (POW) camps. He ended the war in the infamous Colditz Castle, having been in so many POW camps that the question “Did you ever meet Draffin in your travels?” was asked of new prisoners to the camp, to determine they were not a German infiltrator. His post-war career in ORL stuttered, but he was successful in property dealing, becoming quite wealthy. Unfortunately, he appeared several times before the General Medical Council with alcohol problems. He never managed to pass his part II surgical examination and remained a senior registrar until he was struck off in 1967. He died less than a month later. This presentation will briefly trace the interesting history and contribution made by Captain David Draffin.

4:00 pm - 5:30 pm
SCIENTIFIC SESSION

Scientific Session - Women in Surgery - Conway 4 - Conway 5

4:00 pm
When is the right time to take on leadership roles?
Sally Langley

4:30 pm
In/visible barriers, glass ceilings and the motherhood penalty
Barbora East

5:00 pm
MANELS: A Retrospective, Multi-National, Longitudinal Study for Quantitative Analysis of Gender Distribution in Speakers and Panellists at Major Surgical Conferences
Aishwarya Shah
Purpose Females remain disproportionately underrepresented in surgery despite rising trends in women

entering medicine. The visibility of female surgeons at academic gatherings provides a cross-sectional appraisal of inclusivity within the field. We aimed to quantify the prevalence of all-male panels (manels) and female faculty at major international vascular surgery meetings. Methodology Retrospective analysis of international annual meetings by five major vascular surgery organisations between January 2016 and December 2021 was conducted. A manel was defined as a session with 2 or more speakers, all of whom are men. Academic stratification of all invited lecturers, panellists and chairs/moderators used H-index, number of publications, and number of citations. Sex was determined by speaker title, online autobiography, or the Gender Balance Assessment Tool (GBAT). Results 24 conferences were identified, totalling 853 sessions. Of 4730 speakers, 20.1% (n=953) were female. Of the 641 panel sessions, 34.3% (n=293) were manels. There was a significant reduction in the proportion of manels over time (2016=43.3%,2021=32.8%; p<0.05). There was no significant difference in manel prevalence between online (35.6%, n=16) versus in-person conferences (46.5%, n=268)(p=0.155). Compared to female invited lecturers, male invited lecturers had significantly higher H index (m=27.7, f=8.16; p<0.05), publications (m=178.2, f=37.6; p<0.05), and citations (m=4724.9, f=862.7; p<0.05). Conclusion Despite encouraging findings of decreasing manel prevalence in major vascular surgery meetings, only one-fifth of invited speakers were female. This study emphasises the imperative of widening diversity in vascular surgery, specifically in academic meetings.

5:15 pm
Women in Burns Surgery – How the Past Meets the Future
Anna Dargan
According to the Royal Australian College of Surgery (RACS), 46.3% of the medical workforce in Australia and New Zealand were female in 2019, with a prediction that women will overtake men by 2025. Despite the gender diversification, women remain underrepresented in the surgical workforce, however current sub-specialty data is limited. In New Zealand, out of the 6 burns consultants, 3 are female. In Australia, less than half of the burns surgeons in each unit are female, although these numbers have been rising in recent years. In Burns surgery, despite the historically male environment, some of the greatest advances have come from leading female pioneers. Dr Zora Janžekovič was a surgeon practicing in Yugoslavia in the 1960s. She was a pioneer in burns surgery during its revolutionary era, working tirelessly with limited resources, but was often dismissed because she was a female surgeon leading an unknown surgical unit. Dr Janžekovič has since received the 2011 ABA lifetime achievement award for her contribution to burn surgery. In 2017 Medscape listed her in the 25 most influential doctors of the 20th century. A leading Australian burn surgeon Dr Fiona Wood has been awarded a Member of the Order of Australia (2003), and Australian of the Year (2005) and Officer of the Order of Australia (2024) for her contribution to Burn Surgery, including research into novel techniques of skin replacement. Thanks to the work and recognition of these female pioneers, and improvements in gender diversity, female junior doctors have access to improved mentorship and promotion to leadership roles. Gender disparities persist in burn surgery but with strong female leadership in both clinical and academic roles this will continue to improve.

4:00 pm - 5:30 pm
SCIENTIFIC SESSION

Scientific Session - Surgical Education, Rural Surgery, Trainees Association - Dobson 2

4:00 pm
Sustaining surgical training in rurality while suffering the slings and arrows of outrageous fortune
Patrick Byrne

4:25 pm
Setting up the south western Victorian training hub for general surgeons
Glenn Guest

4:40 pm
Personal experience as a rural surgeon and RACS Rural Health Equity Strategic Plan
Bridget Clancy

4:55 pm
Why shall we do rural surgery in Aotearoa New Zealand?
Roberto Sthory

5:10 pm
When the rising tide doesn't lift all waka - how do we get to an equitable place?
Carlton Irving

---

09 May 2024

5:30 pm - 6:30 pm
RACS ANNUAL GENERAL MEETING

Business Meeting - *Cross Discipline* - Auditorium 4

---

09 May 2024

7:00 pm - 10:30 pm
CONGRESS DINNER (TICKETED EVENT)

Speciality Dinner - *Cross Discipline* - Waitaki

---

10 May 2024

7:00 am - 8:20 am
MASTERCLASS (MC15): TRAINING IN ENDOSCOPY (TICKETED EVENT)

Masterclass - General Surgery, Colorectal Surgery - Bealey 5

7:00 am
Training endoscopists
Andrew Luck

7:07 am
Advanced training in endoscopy
Steven Ding

7:14 am
Setting up a unit to support training
Rebecca Shine

7:21 am
Remediation in endoscopy
Brian Kirkby

7:28 am
Panel Discussion
Brian Kirkby

7:00 am - 8:20 am
MASTERCLASS (MC16): ANEURYSM SCREENING HUI: CALL TO ACTION (TICKETED EVENT)

Masterclass - Vascular Surgery - Bealey 2

7:00 am
Welcome and introduction

7:05 am
A NZ AAA screening program: how should it look
Karen Bartholemew

7:25 am
Developing bespoke regional AAA screening in the context of a centrally run programme
Manar Khashram

7:40 am
National Abdominal Aortic Screening Programme - Impact on Intact and Ruptured AAA in the UK and beyond
Arun Pherwani

7:55 am
Improving Screening for Abdominal Aortic Aneurysms using Polygenic Risk Scores
Cj Lee

8:10 am
Discussion

7:00 am - 8:20 am
MASTERCLASS (MC18): NEW ADVANCES IN ABDOMINAL WALL DEFECTS (TICKETED EVENT)

Masterclass - Paediatric Surgery - Bealey 4

7:00 am
Use of mesh in omphalocele major reconstruction - novel technique and case series
Alison Scott
This session will concentrate on the contemporary management of major omphalocele. A case series will be presented and debate will be invited from the audience.

7:20 am
Gastroschisis update
Sherif Emil

7:40 am
Collaborative approach to omphalocele management - an illustrative case
Michael Nightingale

8:00 am
Discussion

---

10 May 2024

8:30 am - 10:00 am
ACADEMIC PAEDIATRIC SURGERY

Scientific Session - Paediatric Surgery - Bealey 5

8:30 am
Update from the ANZAPS research sub-committee on current projects
Maurizio Pacilli, Craig McBride

8:40 am
Publishing in a peer-reviewed scientific journal
Spencer Beasley, Craig McBride, Julian Smith

9:25 am
When is the best time to undertake a high degree in paediatric surgery?
Amiria Lynch, Sharman Tan Tanny

9:55 am
Questions and answers

8:30 am - 10:00 am
BENIGN PROCTOLOGY - HOW I DO IT

Scientific Session - Colorectal Surgery, General Surgery, Rural Surgery - Dobson 1

8:30 am
Retrorectal cysts
Peter Sagar
Tumours of the presacral or retrorectal space are uncommon, pathologically heterogeneous and can be difficult to diagnose. There is much controversy over their surgical management. The retrorectal space contains multiple embryological remnants and diverse tissue types with pluripotent capability.Tthe majority are tailgut cysts, neural, tumours and chordomas. The true incidence of this tumour type in unknown since we have no idea how many asymptomatic tumours there are in the community. The increasing use of routine imaging for a variety of “unrelated” conditions has led to an increase in the number of tumours diagnosed. Thus, presentation and diagnosis of retrorectal tumours is often incidental with 26–50 per cent of patients being asymptomatic. Those that do present, do so with poorly localising symptoms secondary to pelvic organ invasion or nerve compression, the most common being non-specific chronic discomfort. Tumour diversity, anatomical complexity, and rarity of disease gives rise to a challenging surgical problem, managed by very few tertiary centres internationally and with reported substantial morbidity and risk of inappropriate management. CT and MRI can be used for preoperative planning and is effective at differentiating between benign and malignant pathologies. Indeed the key to preoperative diagnosis is good quality radiology; biopsy is often unnecessary. Following diagnosis, patients undergo surgery to alleviate symptoms and prevent malignant transformation; however, this may not be necessary in all cases with some evidence suggesting cystic lesions without suspicious radiological features can be followed by serial imaging without resection. This presentation will provide strategies for the management of retrorectal tumours and offer surgical tips.

8:42 am
Haemorrhoids
Alan Meagher

8:54 am
Fissure in ano
Michelle Thomas

9:06 am
Fistula in ano
Michael Suen

9:18 am
Pilonidal
Michael Johnston

9:30 am
Pruritis Ani
Maree Weston

9:42 am
Case Discussion

8:30 am - 10:00 am
CAN YOU HAVE QUALITY WITHOUT EQUITY?

Scientific Session - Quality & Safety in Surgical Practice, Surgical Education, Indigenous Health, Surgical Leaders, Senior Surgeons Program, Trainees Association, Younger Fellows, Medico-Legal - Dobson 3 - Dobson 2 - Dobson 4

8:30 am
Social determinants of health outcomes
Chris Cunningham

8:45 am
Rural Health Equity Strategic Action Plan – Excellence through Equity
Bridget Clancy

9:00 am
How good policy achieves equity
Diana Sarfati

9:15 am
Patient advocacy to improve outcomes
Paul Villanti

9:30 am
Ethnic disparity in prostate cancer assessment and management between Māori and non-Māori in Aotearoa New Zealand
Eng Ann Toh

9:40 am
Discussion

8:30 am - 10:00 am
FIREARMS TRAUMA AND UPDATE

Scientific Session - General Surgery, Trauma Surgery, Military Surgery - Bealey 4

8:30 am
US experience of firearms
Patrick Reilly

8:50 am
NZ review of firearms injuries and education
Nik Seath

9:10 am
Equity in Trauma - how can we improve?
Max Raos

9:25 am
Pathology of gun shot wounds

Martin Sage

9:45 am
The radiology of ballistics
Andrew Gilkison

8:30 am - 10:00 am
RESEARCH PAPERS - RESPONSIBILITY TO PATIENTS, SOCIETY AND SELF

Scientific Session - Burn Surgery, Plastic & Reconstructive Surgery - Bealey 3

8:30 am
Tips and tricks from an expert
Andrew Hart

8:50 am
Are our current Plastic and Reconstructive Surgery Curriculum recommendations for surgical supervision of Trainees fit for purpose across Australia and New Zealand?
Nicola Peat
The Australasian Plastic and Reconstructive Surgery (PRS) curriculum, which is utilised across both Australia and New Zealand, provides recommendations for the expected level of supervision for key surgical procedures throughout SET training. The opinions of New Zealand PRS Consultants and trainees about the expected level of supervision were presented at the NZAPS Meeting in 2023. At the request of the Chair of the Australian Board of Plastic and Reconstructive Surgery the survey was repeated for our Australian colleagues. Key surgical procedures across early, mid, and late SET training were selected from the current PRS Curriculum. Participants were asked their opinion on recommended supervision levels based on four supervision categories: direct guidance, monitoring and supervision, minimal or no supervision, or safe and competent for most situations. Opinions were then compared to recommendations outlined in the current PRS Curriculum. The survey was sent to current Australian PRS trainees, those who had completed training in the past two years, and all PRS Consultants involved in the supervision of trainees in public hospitals. We compare and analyse the opinions of current Plastic Surgeons and trainees across Australia and New Zealand around supervision levels for key procedures throughout training against each other and the suggested levels in the PRS Curriculum. The PRS Curriculum is currently undergoing review and the opinions of these stakeholders is very important in ensuring that the PRS Curriculum is 'fit for purpose' in guiding the training of Plastic and Reconstructive Surgeons across Australia and New Zealand, especially as Australia has transitioned to competency-based surgical training.

9:00 am
Do margins ≥5mm lead to superior survival and recurrence outcomes in oral cavity squamous cell carcinoma?
Sabrina Koh
BACKGROUND A ≥5mm tumour free excision margin (TFEM) has traditionally been regarded as a clear in oral cavity squamous cell carcinoma (OCSCC). Previous studies group the TFEM into categories: transected, very close <1mm, close 1-4.9mm and clear ≥5mm. This study aimed to evaluate the effect of the TFEM on locoregional recurrence, overall mortality and cancer-specific mortality in OCSCC, and whether there was a specific margin cut-off that negatively impacted these outcomes. METHODS All patients with OCSCC undergoing major head and neck surgery between 2009-2021 at Hutt Hospital were identified from our Head and Neck Database. Primary outcome measures were odds of recurrence, overall mortality and cancer-specific mortality at 1, 2 and 5years. Multivariate analysis was performed adjusting for T-stage, differentiation, perineural invasion, lymphovascular invasion, metastatic disease to the neck, comorbidities and adjuvant radiotherapy. RESULTS The odds of locoregional recurrence within 1 year was reduced by 10% (p=0.98), 2 years by 14%(p=0.011) and 5 years by 13%(p=0.017) for every mm increase in TFEM. The odds of all-cause mortality within 1 year was reduced by 20%(p=0.049), 2 years by 16%(p=0.004), and 5 years by 15% (p=0.003) for every mm increase in TFEM. The odds of cancer-specific mortality within 1 year was reduced by 26%(p=0.003), 2 years by 20.5%(p=0.002) and 5 years by 18%(p=0.005) for every mm increase in TFEM. On multivariate analysis, these results remained significant. There was no margin cut-off that negatively impacted these outcomes. CONCLUSION Increased TFEM are associated with reduced odds of loco-regional recurrence, all-cause mortality and cancer-specific mortality within 1, 2 and 5 years in OCSCC.

9:10 am

Long-term Outcomes Following Reconstruction with Jejunal Free Flaps for Pharyngolaryngectomy Defects

Rachael Chung

Cancers of the head and neck pose a unique surgical dilemma given the complexity and functionality of the structures within this region. The jejunal interposition or free flap has become one of the most widely employed reconstructive techniques for such defects with evidence to support robust functional outcomes. As head and neck cancers become increasingly survivable with advances in multimodal treatment, consideration of long-term outcomes of treatment is imperative for decision-making and patient care. The aim of this study is to review long-term functional and mortality outcomes for head and neck cancer patients who have undergone jejunal free flap reconstruction for pharyngolaryngectomy defects. We reviewed twelve years of retrospective data, from 2012 to 2024, for patients who have undergone this reconstruction at our institution: the Princess Alexandra Hospital Head and Neck Clinic in Brisbane. We have identified 65 patients meeting criteria, and documented patient background, pre-operative status, operative details, complications, speech and swallow outcomes, and mortality. The cohort will be one of largest from a single institution of such patients. Preliminary data has found few complications and good functional outcomes, comparable to the 201-patient retrospective study conducted at our institution in 1995 (1). Hence, we aim to demonstrate that the jejunal interposition flap remains a suitable and robust reconstructive option following pharyngolaryngectomy. 1. Theile DR, Robinson D, Theile DE, et al. Free jejunal interposition reconstruction after pharyngolaryngectomy. Head Neck 1995;17:83-88.

9:20 am

Comparative review of methods to calculate TBSA

Avinesh Chelliah

In the acute assessment and management of burn injuries, various methods have been described to estimate the total body surface area (TBSA), which is used to guide clinical decision-making including volume requirements for fluid resuscitation and the potential for patient transfer to specialist burns referral centres. Existing literature have highlighted that TBSA assessments are often inaccurate and overestimations, largely due to human error. This has potentially significant consequences of over-resuscitation, especially in obese patients, which may lead to capillary damage and burn oedema. The Rule of Nines is perhaps the most widely recognised and applied technique by non-specialist burns care providers, including emergency physicians and paramedics. This method involves assigning percentages of TBSA in easily memorable multiples of nine to different body regions. The Lund Browder Chart was developed earlier at Harvard Medical School in 1944 to improve the accuracy of calculation of body surface area in burns. The chart provides age-adjusted body proportions and is accepted as the most accurate graphical record of burn size. The palmar method involves using the patient's palm as a reference point for estimating TBSA. In its simplest form, the palm is considered 1% of the TBSA, however more recent data has supported using the palmar surface with digits as 0.8% and the palm without digits as 0.5% for adult patients. This presentation will describe and compare the predominantly used methods of TBSA estimation, with attention given to their benefits, limitations and the most appropriate clinical settings for their application.

9:30 am

The feasibility of Negative Pressure Wound Therapy versus Standard Dressings in Paediatric Hand and Foot Burns Protocol: A Pilot, Single-Centre, Randomised Control Trial

Emma Lumsden

Introduction: The goal of paediatric hand and foot burn management is hypertrophic scar and/or contracture prevention. The risk of scar formation may be minimised by integrating Negative Pressure Wound Therapy (NPWT) as an acute care adjunct as it decreases the time to re-epithelialisation. NPWT has known associated therapeutic burden; however, this burden is hypothesised to be outweighed by an increased likelihood of hypertrophic scar prevention. This study assessed the feasibility, acceptability and safety of NPWT in paediatric hand and foot burns with secondary outcomes of time to re-epithelialisation, pain, itch, cost and scar formation. Methods and analysis: This was a single site, pilot randomised control trial. Participants were aged ≤16-years, otherwise well and managed within 24hours of sustaining either a hand or foot burn. Thirty participants were randomised to either standard care (Mepitel® – a silicone wound interface contact dressing – and ACTICOAT™ – a nanocrystalline silver-impregnated dressing) or standard care plus NPWT. Patients were reviewed until three months post burn wound re-epithelialisation, with measurements taken at dressing changes to assess primary and secondary outcomes. Surveys, randomisation and data storage were done via online platforms and physical data storage collated at the Centre for Children's Health Research, Brisbane, Australia. Analysis was performed using Stata statistical software. Results: Data has finished being collated and will be presented at the RACS scientific congress. Ethics and Registration: Queensland Health and Griffith University Human Research ethics approval including a site-specific assessment was obtained. Registered with the Australian and New Zealand Clinical

Trials Registry (ACTRN12622000044729).

9:40 am
An Updated Protocol for Optimising Management of Diabetic Foot Burns
Kiane Zhou
Introduction: Burn injuries to the feet constitute a significant proportion of burn presentations to Concord Burn Injury Service. Although the burns constitute a small percentage of the body, they can have devastating clinical outcomes in terms of morbidity if not managed with expert care, especially burns to feet. With an increasing prevalence of diabetes globally, understanding and refining the management of burns in this specific demographic are crucial. Methods: We describe an updated protocol routinely utilised in our tertiary burns referral centre for ensuring safe outcomes in high-risk patients with diabetic feet burns. After appropriate risk stratification, patients undergo meticulous work-up including biochemical and radiological investigations to determine level of diabetic control or presence of osteomyelitis. There is a low threshold to perform vascular studies to exclude peripheral vascular disease and if confirmed, routinely pursue revascularisation prior to debridement. The burn wound debridement is meticulous and if necessary, temporised with 3M Veraflo (negative pressure wound therapy with instillation) until reconstruction is deemed suitable. Post-operative care involves graduated mobilisation protocols with early fitting of weight-offloading orthoses by podiatrists. Discussion: The optimal management of foot burns involves a multidisciplinary approach with attention given to identifying and managing risk factors appropriately. Standardisation of care in this difficult patient population, in conjunction with appropriate patient education are instrumental in improving patient outcomes.

9:50 am
Ward-based dressing changes in burns patients as an alternative to theatre-based dressing changes
Michael Cheung
Purpose: To demonstrate that ward-based dressing changes offer an alternative to theatre-based procedures for burns patients, reducing the need for theatre resources and general anaesthesia. The absence of fasting requirements before the procedure allows flexibility in scheduling and preserves patients' nutritional status. In the Severe Burns Injury Service at Royal North Shore Hospital, a protocol utilising ward-based ketamine/midazolam patient-controlled analgesia (PCA) has been implemented for burns dressing changes, led by Nursing staff and overseen by a Pain Specialist and a Burns Surgeon. This study aims to evaluate the efficacy of this approach. Methodology: A prospective analysis between July and December 2023 of ward based dressing changes for burns patients required ketamine/midazolam PCA. Results: There were 34 procedures in 15 patients (12 males, 3 females) with an average age of 38. All patients had initially suffered flame burns covering an average total body surface area of 24.8%. In 28 procedures (82%), patients received oral opioid analgesia pre-procedure. Each procedure lasted an average of 98 minutes requiring two nurses for dressing change and one allied health member instigating range of motion and scar therapy. Despite a 30% incidence of transient hallucinations, patients reported high overall satisfaction. Adverse effects were minor and did not require any intervention. Conclusion: Ketamine/midazolam PCA regime is a safe and effective method to facilitate large burns dressing changes in a ward setting that would have alternatively required general anaesthesia and theatre resources. Further research encompassing a longer time frame is warranted to elucidate specific burns patient groups that may benefit from this pathway.

8:30 am - 10:00 am
THE PACIFICA-ANZ ALLIANCE

Scientific Session - Vascular Surgery, Global Health - Bealey 2

8:30 am
Introducing a vascular service: creating a path through the red tape
Ifereimi Waqaniabete

8:45 am
Setting up a vascular service at CWM. A personal experience
Sela Koyamaibole

8:55 am
Setting up a diabetic foot clinic in Samoa

Jo Krysa

9:05 am
Delivering a sustainable vascular service and training for the future
Ronal Kumar

9:15 am
Vascular surgical service in the South Pacific - a shared responsibility
David McClure
The delivery of high-quality health care to all on the Planet is the responsibility of those trained in its procurement. For Surgeons who have had the benefit of working in modern facilities common to the developed World, there is an expectation that the experience, judgement and skills acquired are shared with those in developing countries battling to provide good standards of care to their own peoples. It is to our immediate neighbours in the South Pacific that Australian and New Zealand Surgeons bear this responsibility. Generations of RACS Fellows have shared in this endeavor over many years. There are a variety of avenues through which this can be channeled today, and a few select ones are described. Under the umbrella of RACS Global Health Grants and Partnership division, International scholarships are offered that match South Pacific Surgeons to mentors in Australasian training centres, travel grants are available to provide short term training opportunities, and financial support to South Pacific Surgeons in training can be sourced. The RACS Pacific Clinical Services Health Workforce Improvement Program (PCSHWIP), under the auspices of its Global Health program, provides Visiting Medical Teams (VMT) for volunteer service to 11 countries in the Asia-Pacific region. Nauru is among them, and its Ministry of Health has identified vascular access surgery on its dialysis population as a high priority. Into its second phase, PCSHWIP has sent teams to Nauru in the past two years, and personal experience on one of these trips is described. The Fiji Vascular Project was a collaborative endeavour shared between Fijian and Australian colleagues, was undertaken preCovid, and has provided the impetus for development of an endovascular service in country.

9:30 am
Global vascular championship
Iman Bayat

9:45 am
Questions

---

10 May 2024

10:30 am - 12:00 pm
PLENARY SESSION: THE SURGEON, THE TEAM AND THE PATIENT

Plenary Session - *Cross Discipline* - Dobson 4 - Dobson 3 - Dobson 2

10:30 am
Palliative Care and Surgery
Pringl Miller

10:55 am
Support for Trainees and Pastoral Care
Sarah Giutronich

11:20 am
Introduction
Rowan Parks

11:25 am
RSCEd survey and response to sexual harassment in the workplace
Clare-Ellen McNaught

11:50 am
Closing remarks
Kerin Fielding

---

10 May 2024

12:00 pm - 12:30 pm
KEYNOTE LECTURE - DR PHIL BAGSHAW (CHRISTCHURCH, AOTEAROA NEW ZEALAND)

Keynote Lecture - General Surgery, Colorectal Surgery - Dobson 1

12:00 pm
Addressing unmet healthcare need: the investigation of fresh rectal bleeding in adults under 50 years of age at the Canterbury Charity Hospital Trust.
Philip Bagshaw
Canterbury Charity Hospital Trust runs a day hospital that treats some of the many secondary elective patients who can't access numerous types of secondary elective care at public hospitals in our region and who can't afford private care. It's run by a large number of volunteers and a skeleton staff, and is totally funded by charitable giving.(1) Because of serious under-resourcing of endoscopy services in Aotearoa New Zealand, and growing concern with high incidence of colorectal cancer (CRC) in our young population, the local District Hospital Board asked us to take over investigation of adults under 50 years of age, with monosymptomatic fresh rectal bleeding, which we've done by initial flexible sigmoidoscopy (FS). Between 2017 and end of 2023, we saw 1,389 patients and found: 1.1% had CRCs, 27.4% had colorectal polyps and 4.9% had high risk lesions. There were no international guidelines on which patients should have completion colonoscopy, based on FS findings, so we've published some,(2) and evaluated them.(3) With the Dept Engineering, Canterbury University we've evaluated different heart rate variability metrics for assessment of patient stress levels and vasovagal reactions during unsedated FS,(4) and completed an RCT on effects of an information video and patient-controlled Entonox inhalation on patient stress levels and clinical efficacy of FS.(5) 1. NZ Med J. 2022 Apr 1;135(1552):37-48. 2. Gut 2021 Feb;70(2):441-2. doi:10.1136/gutjnl-2020-321655. 3. Dis Colon Rectum. 2024 Jan 1;67:160-7. doi: 10.1097/DCR.0000000000002947. 4. Proc. ASME 2023 IDETC-CIE/MESA. Boston, USA. doi.org/10.1115/DETC2023-114621. 5. J Gastroenterol Hepatol 2023 Dec 6. doi:10:1111/jgh.164.

12:00 pm - 12:30 pm
KEYNOTE LECTURE - DR RACHEL BELL (NEWCASTLE, UK)

Keynote Lecture - Vascular Surgery - Bealey 2

12:00 pm
Compassionate leadership in surgery - how to be a strong and kind leader
Rachel Bell

---

10 May 2024

12:30 pm - 1:30 pm
ASC 2024 ORGANISING COMMITTEE DEBRIEF MEETING

Business Meeting - *Cross Discipline* - Bealey 1

---

10 May 2024

1:30 pm - 2:00 pm
KEYNOTE LECTURE - MR PAUL VILLANTI (MELBOURNE, AUSTRALIA)

Keynote Lecture - Surgical Leaders - Dobson 1

1:30 pm
The Movember journey
Paul Villanti

1:30 pm - 2:00 pm
KEYNOTE LECTURE - PROFESSOR ROB FITRIDGE (ADELAIDE, AU)

Keynote Lecture - Vascular Surgery - Bealey 2

1:30 pm
IWGDF guidelines salient points and future research
Robert Fitridge

---

10 May 2024

2:00 pm - 3:30 pm
GENERAL COLON

Scientific Session - Colorectal Surgery, General Surgery, Rural Surgery - Dobson 1

2:00 pm
What is SSPS and what do I do about it?
Christopher Wakeman
errated polyposis syndrome (SPS) is a condition characterized by the presence of multiple and/or large serrated polyps in the colon, representing a significant risk factor for colorectal cancer (CRC). Recent updates in the clinical criteria for SPS have refined the definition to include specific criteria related to the number and size of serrated polyps. Individuals with SPS have an increased risk of CRC, emphasizing the importance of early detection and intervention. The serrated pathway of carcinogenesis, involving the accumulation of serrated polyps, plays a crucial role in the development of CRC. RNF43, a gene implicated in the Wnt pathway regulation, has been linked to the serrated pathway and may contribute to the development of SPS and serrated polyps. Understanding the genetic variants of RNF43 in relation to SPS could provide valuable insights into the pathogenesis of this syndrome. The indications and age for recommended surgery in patients with SPS remain unclear, but it is suggested that individuals under 40 years old with more than 100 polyps should consider prophylactic surgery. This decision underscores the importance of individualized treatment strategies based on the patient's risk profile and polyp burden. This abstract highlights the significance of recognizing the serrated pathway in CRC development and the importance of early screening and detection of SPS to mitigate the risk of CRC. Further research on genetic factors, such as RNF43 variants, is essential for a comprehensive understanding of SPS and its implications for colorectal cancer prevention and management.

2:12 pm
Appendiceal cancers - what to do when you find them intra- and post- operatively
Cherry Koh

2:24 pm

Malignant polyps: estimating the risk of LN mets/ optimal surveillance in non-operative management of malignant polyps
Jesse Fischer
Malignant colorectal polyps present a common dilemma in clinical practice. Complete endoscopic removal may be adequate treatment, but the risk of lymph node metastases may prompt consideration of major colorectal resection, with significant potential risks associated. Although the incidence of endoscopically resected malignant polyps is increasing, our ability to predict lymph node metastases remains poor with the vast majority of patients undergoing surgical resection being found to have no residual cancer in the resection specimen. This presentation will review the best available evidence to assist clinical decision-making and discuss the path forward for this significant clinical problem.

2:36 pm
Pre-biotics, pro-biotics and bowel preparation
Amanda Nikolic
Postoperative complications are common post colorectal surgery and contribute to increased morbidity, mortality, length of stay and healthcare costs. But what else can we do to reduce these complications? The human microbiome interacts with the human host in complex ways. It can both improve the health of the host, as well as reduce the health when dysbiosis is present. Interventions which alter the microbiome including prebiotics, probiotics, and bowel preparation with or without antibiotics may be the newest tools in our arsenal to improve postoperative complications in our patients.

2:48 pm
Primary anastomosis for acute diverticular resections
Andrew Ing
What would Henri say? Presenting a review of progress in acute resection of diverticular disease. Reflections on outcomes important to patients. Is there an evidence base to support alternatives to Hartmann's procedure?

3:00 pm
Diverticulitis and the microbiome
Greg Turner
Alterations in the colonic microbiome have long been implicated in several intestinal disease processes including IBD and cancer. Colonic diverticulosis is common, affecting up to 70% of people by the 8th decade. However, fewer than 5% of affected individuals will go on to develop acute diverticulitis (AD). The reason why only a small minority develop AD is uncertain but may be related to alterations in their colonic microbiome. This talk discusses the current body of evidence for microbiome alterations being associated with AD, including the results of a study performed locally.

3:12 pm
Discussion

2:00 pm - 3:30 pm
TRAUMA SYSTEMS IN THE PAST AND THE FUTURE

Scientific Session - Trauma Surgery - Bealey 4

2:00 pm
High fidelity trauma training will work
Max Berry

2:20 pm
Successes and failures over 35 years of a State Trauma System
Patrick Reilly

2:40 pm
History of Aotearoa New Zealand trauma system
Ian Civil
Trauma systems were a concept that was first introduced in the civilian trauma world in the 1970s after the Vietnam War. In NZ this concept was unexplored until the 1990s. It was not until 2012 that the Government

formally introduced a trauma system (network) but very like the system reintroduced by Heath NZ in 2023 it lacked the key elements of executive decision-making and budgetary discretion. Acknowledging the overwhelming impact of a successful system on the Accident Compensation Corporations future liability this organisation began funding the National Trauma Network in 2015. With the success of initial activities the ACC funded a significant business case in 2018 that allowed the National Trauma Network to achieve major clinical process and outcome goals. The Network has presented its activities in local and international fora and become recognised as a world-leading national system. With a change in health provision philosophy in 2023, the National Trauma Network was handed back to Health NZ and the key tenets of executive decision making and budgetary discretion abandoned. In the year to date much of the progress of the system has stalled while the new system is bedded in. Sometimes the benefits achieved in promising periods are maintained and on other occasions they are lost. This cycle has occurred three times in NZ in the last 30 years. It is too early to tell whether the clinical high ground of the National Trauma Network 2012-2023 will be maintained or lost.

2:55 pm
History of Australian trauma systems
John Crozier

3:10 pm
NZ trauma in the new world of TWO
James Moore

2:00 pm - 3:30 pm
VEINS, LYMPH AND AVMS

Scientific Session - Vascular Surgery - Bealey 2

2:00 pm
A survey of current clinical practice in varicose vein surgery in Aotearoa New Zealand
Eric Lim
Purpose Despite varicose veins being a common clinical condition faced by Vascular Surgeons in day-to-day practice, current literature shows the existence of variation in clinical practice. This was particularly evident especially in the use of thromboprophylaxis pre and post treatment. Our study is aimed at assessing the current clinical practice of varicose vein surgery in Aotearoa New Zealand. Methodology An invitation email was sent to all active Vascular Surgeons and Fellows of the Australasian College of Phlebology (ACP) in Aotearoa New Zealand. A link to the survey questionnaire was included in the email. The 32-question survey was delivered electronically via Google Forms. Participants were given 4 weeks to complete and submit their responses. Results A total of 24 responses were recorded giving a response rate of 32.4%. Radiofrequency ablation (43.6%) and ultrasound-guided foam sclerotherapy (30.8%) are the two most preferred treatment methods of varicose veins. 79% of Vascular Surgeons do not apply any pre-operative deep vein thrombosis (DVT) scoring system in comparison to Phlebologists in the study cohort ($p<0.001$). All treating clinicians apply compression post procedure. Variation exists between clinicians in terms of duration, drug choice and dosage in the management of DVT and endothermal heat-induced thrombosis (EHIT) post varicose vein surgery. Conclusion There exists a variation in the surgical management of varicose veins between Vascular Surgeons and Phlebologists in Aotearoa New Zealand. Formation of a clinical guideline is warranted to ensure provision of best medical care to patients.

2:08 pm
Current management of ileo-femoral VTE
Laurencia Villalba
CURRENT MANAGEMENT OF ILIOFEMORAL DVT Iliofemoral DVT account for up to 25% of all DVTs and are associated with an increased risk of embolic and post-thrombotic complications when compared to more distal DVTs. The iliofemoral segment recanalizes only in about 20% of cases, this causes pelvic venous obstruction, which is associated with more venous claudication and ulceration, and more rapid disease progression. Despite treatment with anticoagulation and compression, up to 50% of patients with iliofemoral DVT will develop Post Thrombotic Syndrome. Early thrombus removal offers a means of restoring venous patency and preserving valve function. These therapies are associated with much faster symptom resolution, return to pre-morbid functional state and less post-thrombotic symptoms. Interventional options for thrombus removal are growing exponentially and are changing our perspective on patient selection

since catheter-based approaches offer a safe and effective option that not only benefits patients but also reduces the burden in the healthcare system. In our own experience success rate of over 90% can be achieved with a low complication rate. We present long term outcomes with less than 10% of patients having post-thrombotic syndrome at a median FU of 4 years. We also present the evolution of our treatment protocols, device choice and patient selection.

2:18 pm
PE Why treat? options and outcomes
Laurencia Villalba
PULMONARY EMBOLISM Why treat? Options and Outcomes Acute pulmonary embolism (PE) is a common presentation worldwide. Up to 45% of patients with PE develop right ventricular (RV) dysfunction, subsequent haemodynamic compromise and death can occur if revascularisation is not rapidly provided. Despite the creation of Pulmonary Embolism Response Teams (PERT), a mortality rate of 41% at 3 months was reported in 2018. Furthermore, long term functional impairment has been reported to affect at least 18% of survivors. Australian data from 2008 estimated the cost of VTE to be $1.72 BILLION (0.15% OF GDP)of this: 1.38 billion (80.0%) was productivity lost to morbidity and mortality of young Australians. In the presence of haemodynamic compromise, current guidelines suggest that anticoagulation alone is inadequate and recommend systemic thrombolysis (ST), catheter-directed thrombolysis (CDT) or open thrombectomy, depending on local expertise and resources. ST is the first line option for most centres due to its availability and fast action, however, it is associated with 9.2% major bleeding and 1.5% intracranial hemorrhage. In addition, because of frequent thrombolytic contraindications and medical comorbidities, less than 30% of high-risk PE patients receive systemic thrombolysis. The need for prompt, safe and effective thrombus removal is evident. We present our experience building a Vascular Surgery led PERT, our protocols, device selection and outcomes.

2:28 pm
Safety of venaseal in modern endovenous treatment
Chris Brooks

2:38 pm
Arterial complications of sclerotherapy and their management
Mark Jackson, Mark Jackson

2:48 pm
Current strategies in the management of lymphoedema
Vani Prasad
Lymphatic Reconstructive Surgery (LRS) is rapidly evolving over the last 15 years, but it is still an adjunct in the management of Lymphoedema. LRS depends on whether the affected limb is predominantly fluid, or fat – Physiological procedures for Fluid and Debulking procedures for fatty tissue. Whilst the domain of treatment still is lifelong complex decongestive therapy, it is more and more widespread to treat the disease with a surgical focus on physiologic, reconstructive strategies or debulking surgery. Lymphovenous Anastomosis (LVA) and Vascularized lymph node transplantation (VLNT) are the mostly frequently applied, physiological reconstructive techniques which address restoration or improvement of physiologic lymph clearance. Debulking procedures involve removal of lymphoedematous tissue via liposuction or excision of tissue. Liposuction is performed when the affected limb is predominantly composed of fatty tissue. In rare situations, resection and reconstruction of entire lymphoedematous tissue could be the only option.

2:58 pm
Treatment strategies for vascular malformations
Martin Krauss

3:13 pm
Discussion

---

10 May 2024

4:00 pm - 5:30 pm
ARTERIES AND DIABETES - RISK AND RESPONSIBLITY

Scientific Session - Vascular Surgery - Bealey 2

4:00 pm
The role of palliative care in advanced peripheral arterial disease
Monica Shahid
Peripheral Arterial Disease (PAD) represents a significant health challenge, especially in its advanced stages, where therapeutic options often shift from curative to palliative. This review explores current literature on the use of palliative care in advanced peripheral arterial disease and the strategies available. Advanced PAD is frequently characterised by chronic limb threatening ischaemia (CLTI), leading to chronic pain, non-healing ulcers, and potential limb loss. Traditional management emphasises revascularisation and medical therapy; however, in advanced stages, these interventions may no longer be viable, necessitating a pivot to palliative care. Recent studies highlight the importance of a multidisciplinary approach, integrating pain management, wound care, and psychosocial support. Pain management is a cornerstone of palliative care, and a combination of pharmacologic interventions and non-pharmacologic therapies can be effective. Psychosocial support, addressing the emotional and mental health challenges faced by patients with advanced PAD, has gained attention. Studies emphasise the role of counselling, support groups, and family involvement in improving patient well-being. Current literature also explores the role of patient education in enhancing self-management and decision-making. Unfortunately, palliative care has been underutilised in this patient cohort. Furthermore, the involvement of palliative care has been closer to patient death rather than to their time of diagnosis of 'no option' CLTI. In conclusion, palliative care in advanced PAD requires a comprehensive, multidisciplinary approach. Further efforts are required to increase the early involvement of palliative care in CLTI patients.

4:08 pm
Stratifying risk and shared decision making - does it make a difference?
Sarah Aitken

4:23 pm
Surgical discharge planning
John Geddes

4:38 pm
Diabetic foot disease endo vs. open treatment post CLI Best
Philip Allan

4:48 pm
Pedal acceleration time and clinical correlation
Sinead Gormley

4:58 pm
Diabetic foot clinic monitoring and audit: evaluating whether we are effective
Denisha Dahya

5:08 pm
Management of Vasopressor Induced Limb Ischaemia in Septic Shock
Gabrielle McMullin

5:18 pm
Prize presentation
Rachel Bell