Agenda

02 May 2025

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

Speciality Dinner - Trainees Association, Younger Fellows

Venue: Henley's Bar & Kitchen - Upstairs

03 May 2025

10:00 am - 10:30 am MORNING TEA - SATURDAY

Catering - *Cross Discipline* - Hall 5

03 May 2025

10:30 am - 12:00 pm OPENING PLENARY SESSION - FROM ACE TO SPACE OF SURGICAL INNOVATION

Plenary Session - <u>*Cross Discipline*</u> - Darling Harbour Theatre

10:30 am Welcome to Country

10:45 am <u>The President's Welcome</u> <u>Kerin Fielding</u>

10:55 am <u>The Conveners' Welcome</u> <u>Upeksha De Silva, Payal Mukherjee, Henry Woo</u>

11:00 am Introducing Professor Fiona Wood Owen Ung

11:02 am Wearing the scars of commercialisation — Skin cell based therapies Fiona Wood

Wearing the scars of commercialisation Skin cell based therapies Tissue engineering solutions have been applied to skin many decades. The focus was on the development of epithelial cell-based solutions alongside the development of dermal scaffolds for the use in large surface area bun injuries when the available donor sites were limited. The capacity to grow cells in culture led to laboratory-based tissue expansion with large areas of wound cover possible form a small donor site. The drawback was the time taken to culture the cells, the cost to do so, and the complexity of use. The development of a point of care medical device to harvest an autologous epithelial cell suspension ReCell was developed to reduce the time between cell harvest and treatment with reduction in cost. The reduction in time to healing was associated with reduction in scarring and in the length of stay. With the IP assigned to a not for profit foundation the team established a company to commercialise the device focused on making the technology available and

supporting the ongoing research. To realise the potential of the developing technologies needs alignment of not only the science and engineering but also the commercial upscaling of production in a safe and regulated framework for clinical use. In addition the education and training for the introduction of new technology within the health system is essential, bringing together the technology and systems for utilisation to optimise the patient outcome. The journey from bench to bedside will be presented

11:20 am

Introducing Associate Professor Celalettin Varol Henry Woo

11:22 am <u>The ProFocal Story - A New Hope for Men with Prostate Cancer</u> <u>Celalettin Varol</u>

11:40 am Introducing Dr John Cherry Payal Mukherjee

11:42 am

From the ice to the stars - Australian Antarctic medical practices supporting human spaceflight John Cherry

Australia has conducted expeditions to the Antarctic for more than a century. The Australian Antarctic Division (AAD) has maintained a permanent presence in East Antarctica since 1954, now with three Antarctic research stations (Casey, Davis and Mawson) and one sub-Antarctic research station on Macquarie Island. Each station is supported by an Antarctic Medical Practitioner who is responsible for the comprehensive medical, surgical, anaesthetic and dental care of their expeditionary team with advanced training and telehealth support provided by the Polar Medicine Unit in Tasmania. The Polar Medicine Unit has had an operational and research collaboration with the National Aeronautics and Space Administration (NASA) since 1993 which has facilitated scientific and operational studies examining human risks associated with spaceflight. In 2023, the AAD entered into an agreement with the Translational Research Institute for Space Health (TRISH) of the Baylor College of Medicine, providing access to Australia's Antarctic space analogue environment for research that will support the health of Antarctic expeditioners and astronaut crews undertaking long duration exploration missions. Astronauts on these missions will experience increased physical isolation and will require greater autonomy as spaceflight extends further from Earth. This will require new approaches to crew selection, medical training, resourcing and clinical support which have not been required in low earth orbit. The AAD's long history of operating established Antarctic research stations over isolated Antarctic winters and the advanced medical capabilities provided by the Polar Medicine Unit provide a medical model well suited to future long duration spaceflight.

03 May 2025

12:00 pm - 12:30 pm THE PRESIDENT'S LECTURE - PROFESSOR ROWAN PARKS (EDINBURGH, UK)

Plenary Session - *****Cross Discipline* - Darling Harbour Theatre

12:00 pm Connecting the Past to Present and Future Rowan Parks

03 May 2025

12:30 pm - 1:30 pm LUNCH - SATURDAY

03 May 2025

12:45 pm - 1:15 pm

Johnson & Johnson MedTech Lunch Session: Innovation in Johnson & Johnson MedTech technology over the past 30 years and what's next

Scientific Session - <u>*Cross Discipline</u>* - Meeting Room C4.10 - Meeting Room C4.9

03 May 2025

1:30 pm - 3:30 pm Advances in Australasian urology

Scientific Session - Urology Surgery - Meeting Room C3.4 - Meeting Room C3.5

1:30 pm

Highlights of Australian Research in 2023/2024 – Tips for success Marlon Perera

1:40 pm

<u>Robotic assisted vs traditional laparoscopic partial nephrectomy operative outcomes: A single operator</u> <u>comparative study</u> <u>Arva Bahadori</u>

1:44 pm

<u>Oncological outcomes post focal low-dose-rate brachytherapy in men with low-intermediate risk prostate</u> <u>cancer – results from LIBERATE registry</u>

Jeremy Cheng

Purpose: Focal therapy has emerged as a novel approach to minimise adverse events without compromising oncological outcomes. This study reports oncological outcomes following focal low-doserate (LDR) brachytherapy for low-intermediate risk prostate cancer. Methodology: Patients were recruited from an ongoing clinical registry of focal LDR brachytherapy for low-intermediate risk prostate cancer (LIBERATE). Rigorous follow-up was conducted with surveillance mpMRI and TPBx completed at 18-36 months post-treatment. Control was achieved on repeat biopsy if there was no cancer or ISUP GG1 in <10mm of core or GG2-3 grade cancer with treatment effect. Progression occurred if there were no pathological changes from baseline or tumour upgrading. Results: Of 120 men enrolled, 54 (45.0%) have completed their repeat imaging and biopsy with a median follow-up of 38 months. Oncological control was reported in 42 (77.8%) patients, including 25 negative biopsies, 12 clinically insignificant disease, and 5 in-field lesions with treatment effect. Ten men (18.5%) had out-of-field pathological progression, of whom 7 were managed with ongoing active surveillance (5-10% pattern 4), 1 underwent salvage RARP, 1 had contralateral lobe LDR brachytherapy, and 1 proceeded to EBRT. Two men (3.7%) had concurrent out-of-field pathological progression and in-field lesions with treatment effect; of these, 1 had salvage RARP, and 1 was managed with watchful waiting. Conclusion: These early results suggest that focal LDR brachytherapy for lowintermediate risk, single lesion, imaging-visible prostate cancer demonstrates satisfactory oncological control at 18-36 months. However, further follow-up is needed to assess long-term oncological outcomes.

1:48 pm Lu-PSMA – The new snake oil? An Australian experience Kieran Sandhu

<u>perspective</u> Damien Gibson

Purpose: This case series describes the experience and outcomes of multiple Australian surgeons performing robotic-assisted bladder diverticulectomy (RABD), highlighting the procedural effectiveness and safety, for both benign and malignant indications for diverticulectomy. Methods: Outcomes were analysed from Thirteen experienced Australian urologists who performed RABD between 2016 and 2023. Retrospective analysis was performed on prospectively collected data which included patient demographics, diverticulum characteristics, surgical approaches, and post-operative outcomes. Surgical techniques included the extravesical and intravesical approaches, with the focus on maintaining oncological principles in cases of malignancy. Results: A total of 28 patients underwent RABD, with the majority being male and a mean age of 63.9 years. All surgeons utilised a four port transperitoneal approach and opted for the extravesical dissection of the diverticular neck, one case utilised both extravesical and a trans-diverticular approach. Outcomes demonstrated symptomatic resolution in non-malignant diverticula, while oncological outcomes indicated clear margins in 90% of malignant cases. The average length of the procedure was 106 minutes, minimal blood loss and a mean hospital stay of 2.67 days. Early complications occurred in 14% with the majority CD grade II. Conclusion: RABD, predominantly via the transperitoneal extravesical approach, has emerged as a safe, effective, and reliable surgical intervention for both malignant and non-malignant bladder diverticula. The consistent surgical approach and excellent outcomes demonstrated in this case series reinforce the procedure's potential as a safe option, even in the setting of malignancy within a diverticulum.

1:56 pm

How the political party that holds your electorate determines if your prostatectomy is via robot or open surgery

Matthew Alberto

Purpose In a nationalised health system, it would be expected that surgical approach to cancer would be centralised, and that there would be minimal variation within a single city. Anecdotally however, there seemed to be areas of our large city where fewer people were being treated by minimally invasive surgery for prostate cancer. We sought to objectify whether there were variations between electorates that were represented in the frequency of prostate cancer being treated by robotic vs open surgery. Methodology All radical prostatectomies in the city of Melbourne, Australia were identified for a 3-year period, coinciding with the electoral cycle for representatives from this state. The percentage of patients from each electorate who had treatment by robotic vs open radical prostatectomy was calculated. Electorates were then compared by the political party which was the incumbent in the seat. Results Marked variations in the frequency of robotic radical prostatectomy in a given electorate were apparent, with a range from 24% to 79%. Open radical prostatectomy was the inverse. These variations were however, consistently in favour of robot assisted surgery in the seats held by the more conservative parties, and in favour of open surgery in those seats more aligned to the parties that aligned with the left of the political spectrum. Conclusion Even in a nationalised healthcare system patients from electorates that have voted in a conservative representative are more likely to be treated with minimally invasive surgery than open surgery. Measures should be taken to correct this inequity and to provide the same standard of care to all members of the community regardless of where they live in a metropolitan area.

2:00 pm

Natural History of LUTS Following TURP: A Prospective Observational Study Alice Thomson

Purpose: TURP is the most common surgical intervention to address bladder outlet obstruction. Patients are counselled to expect an exacerbation of irritative symptoms post-operatively such as frequency, urgency and nocturia. This study aims to investigate the temporal changes in LUTS following TURP, as assessed by fortnightly completion of the International Prostate Symptom Score (IPSS). Methods: Forty-two men undergoing TURP were prospectively enrolled. Patients completed the IPSS pre-operatively and at 2, 4, 6 & 8 weeks post-operatively. Age, BMI, prior TURP, resected prostate mass, histology, analgesia, UTIs and unplanned readmissions were also collected. Results: Irritative symptoms saw an immediate improvement at 2-weeks compared to baseline which was sustained until final follow up. Quality of life improved by 54% and was moderately correlated with frequency (r=0.68), weak stream (r=0.63) and nocturia (r=0.61). Both resected prostate mass and age displayed poor correlation with IPSS symptoms (r=-0.09 to -0.36 and 0.01 to 0.22 respectively). Analgesia use decreased over time to 34%, 16%, 12%, and 8% at 2, 4, 6, and 8-weeks respectively. Antibiotics for UTI were given in 14% of patients, whilst 5% required re-admission due to clot retention. Conclusion: Contrary to common clinician expectations, irritative LUTS did not worsen in the initial post-operative period. Quality of life was correlated with a mixture of irritative and obstructive symptoms. These findings now quantify expected rates of improvement post-operatively and allow for the potential of tailored interventions such as pharmacotherapy to enhance patient experience and outcomes.

2:04 pm

<u>Validating a urine biomarker CXBladder- a North Queensland study</u> <u>Claris Hui Qi Oh</u>

Introduction High demand for cystoscopies performed for bladder cancer diagnosis or surveillance imposes significant burden or regional centers with limited capacity. CXBladder is a urinary biomarker test that estimates the likelihood of bladder cancer. International and Australian studies suggested its utility in excluding patients for bladder cancer, reducing unnecessary cystoscopies(1,2). We conducted a prospective observational study to validate its performance in our centre. Methods Included patients presented for flexible cystoscopy for either workup of haematuria, or bladder cancer surveillance. Exclusion criteria included active urinary tract infection, or recent urethral instrumentation. Patient characteristics from electronic records and a single urine sample were collected and analysed. Results 73 patients were eligible for analysis. 41 patients tested positive, 6 of whom proceeded to surgery for tumour removal. Among the 32 patients testing negative, two proceeded to surgery (NPV=0.94, PPV= 0.16). In this cohort, only two patients (2.7%) had confirmed bladder cancer. One patient was newly diagnosed with low grade Ta tumour; the other had a high-grade Ta recurrence. Both tested CXBladder positive (NPV =1). Conclusion CXBladder is useful to exclude bladder cancer, reducing the need for cystoscopies. Reference: 1.Li K et al. Cxbladder Monitor testing to reduce cystoscopy frequency in patients with bladder cancer. Urol Oncol. 2023;S1078-1439(23)00009-1. 2.Koschel S & Zargar H A prospective observational study assessing CxBladder compared to conventional haematuria workup for detection of urothelial carcinoma [Conference presentation]. USANZ Victorian Section Meeting 2023, Melbourne, Australia

2:08 pm

Extended versus standard pelvic lymph node dissection in bladder cancer patients undergoing radical cystectomy: systematic review and meta-analysis Jordan Santucci

2:12 pm

<u>Multicenter Comparison of Clinically Significant Prostate Cancer Detection via Cognitive vs. MRI Fusion</u> <u>Transperineal Prostate Biopsy</u>

Charlton Martin

Introduction: Prostate cancer is a major public health concern and a leading cause of cancer-related morbidity and mortality. This study aims to compare positivity rates for clinically significant prostate cancer (csPCa) detected through three different transperineal prostate biopsy (TPPB) methods: Under general anesthesia (GA) with a brachytherapy grid and cognitive MRI fusion (CF), Freehand under local anesthesia (LA) with CF, and under GA with software-based MRI fusion (SF). Current data on this topic are limited to small series, making this multicenter study particularly relevant. Methods: A total of 1,272 patients from Australia, New Zealand, and Switzerland were included in this retrospective review. Collected demographic and clinical data included PSA levels, PSA density (PSAD), MRI report (PiRADS score), BMI, and histology results. Statistical analyses were conducted to assess differences in csPCa positivity rates among the three methods. Results: The study included 259 Australian patients who underwent TPPB with CF under GA, 505 New Zealand patients who had freehand TPPB with CF under LA and 508 Swiss patients who had TPPB under GA with SF. For patients with PiRADS 3 lesions, csPCa positivity rates were 23% (Australia), 20% (New Zealand), and 12% (Switzerland); for PiRADS 4, rates were 49%, 67%, and 46%, respectively; and for PiRADS 5, rates were 80%, 85%, and 76%, p value < 0.001. Notably, there were significant differences (p < 0.001) in age, PSA levels, and PSAD among the centers, which may have contributed to these variations in csPCa detection rates between methods. Conclusion: Our findings suggest that freehand biopsies under LA with CF demonstrate higher csPCa positivity rates compared to the other methods.

2:16 pm

Akeeko Medical; introduction of a novel minimally invasive approach to ureteric stent insertion Joseph Ischia

2:36 pm

Patient reported outcomes following robotic-assisted radical prostatectomy in the elderly population Victor Yu

Purpose: Curative surgery for prostate cancer is uncommonly offered to patients aged ≥75, balancing functional outcomes against survival benefit. Improvements in robot-assisted radical prostatectomy (RARP) and increasing overall life expectancy have recently challenged this paradigm. We compared patient-reported outcome measures (PROMs) between elderly (≥75 years) and younger patients (<75 years). Methodology: Retrospective multicentric review was performed of all RARP patients between October 2016 to December 2023. Patients routinely completed pre-operative questionnaires including the 36-Item Short

Form Survey (SF-36), International Index for Erectile Function (IIEF-5), International Prostate Symptom Score (IPSS) and Expanded Prostate Cancer Composite (EPIC). Patients were followed up with questionnaires at 6-weeks, 6-months and 1-year post-operatively. Results: A total of 397 patients were included (Younger;n=332[83.6%],Elderly;n=65[16.4%]). Elderly patients reported mental health improvement 6-months following RARP (SF-36 mean difference [MD] 4.82, p=0.01) without any significant differences in physical quality of life (MD -1.56, p=0.5) when compared to their younger counterparts. Elderly patients reported better outcomes compared to younger patients in terms of bowel 97.68±3.68 vs 92.24±11.96, p=0.001) and hormonal symptoms 96.82±3.75 vs 87.58±13.97, p<0.001) at 1-year. No differences were observed between groups in terms of sexual and urinary function. Conclusions: Elderly patients undergoing RARP report equally favourable post-operative outcomes and quality-of-life when compared to younger patients. Continence and sexual function remain important considerations in the post-operative recovery of all RARP patients.

2:40 pm

<u>Outcomes of Radical Nephrectomy with Caval Tumour Thrombectomy including a novel two-stage</u> <u>approach</u>

Daniel Crisafi

Background Renal vein and caval tumour extension occur in 10-25% of patients with renal cell carcinoma. This study aims to examine perioperative morbidity and survival outcomes after radical nephrectomy with inferior vena cava tumour thrombectomy at a quaternary institution in Australia. Methods This was a retrospective review of nephrectomy with tumour thrombectomy cases between June 2012 and 2022 at a single centre, followed up until September 2024. Overall survival (OS) was visualised by Kaplan-Meier plots and comparisons between survival by presence of metastases, margin status, and thrombus level (I-III vs IV) were explored with the log-rank test. Recurrence-free survival (RFS) in patients without initial metastases was also examined. Results We identified 39 patients, 25 (64%) were male and the median (IQR) age was 64 years (55–69). Metastatic disease was present in 14 patients (36%). 19 (49%) had level IV (supradiaphragmatic) tumour thrombus involvement. Six patients (15%) died in hospital, including two intraoperative deaths. A further 14 (36%) experienced Clavien-Dindo grade III or IV complications during their hospital stay. The median OS was 57 months (95%CI: 17-not reached). Excluding those who died in hospital, the median OS was 60 months (95%CI: 33-not reached). There was a significant difference in OS observed by presence of metastatic disease (p=0.003), but not with margin status (p=0.35) or thrombus level (p=0.22). The median RFS for M0 patients was 60 months (95%CI: 8-not reached). Conclusion While associated with high morbidity and mortality, nephrectomy and caval thrombectomy remains an effective treatment option for otherwise fatal advanced RCC.

2:44 pm

<u>Complications and Urinary Retention post-Pelvic Floor Surgery in Christchurch: A 5-year Review</u> <u>Andrew McIntyre-Robinson</u>

Purpose Stress urinary incontinence (SUI) is a common condition affecting up to 50% of women in their lifetime which can have a significant impact on daily activities due to anxiety and embarrassment. Surgical options for management include urethral bulking agents or slings (autologous rectus fascial sling (RFS) or synthetic mesh (TVT)). Pelvic mesh has come under global scrutiny in recent years due to complications. The aim of this study was to identify complication rates and rates of urinary retention after surgical intervention for SUI. Methodology A five-year prospective audit was undertaken of all patients who underwent surgical management of incontinence in public and private hospitals across the Canterbury, West Coast, South Canterbury and Wairarapa regions from 2018 to 2024. Complications (Clavien-Dindo classification) and rates of urinary retention were recorded and analysed. Results A total of 410 procedures were included for analysis. Post-surgery urinary retention occurred on 4 occasions (0.96%), all of which were post rectus fascial sling. Overall rates of complications were 23.2% for rectus fascial sling, 12.1% for retropubic mesh, and 2.4% for urethral bulking agents. Overall Clavien-Dindo complication rates less than grade 3 were 10.2%, and grade 3 or greater were 1.7%. Conclusion To our knowledge this is the first multi-centre report across both public and private hospitals to assess complications and rates of urinary retention post-SUI surgery in New Zealand. Our results suggest grade 3 or above complication rates post SUI surgery were low. Our results also suggest urinary retention was rare post SUI surgery and is more likely post rectus fascial sling than post retropubic mesh or urethral bulking agents.

2:48 pm

<u>The Feasibility and Pathological Outcomes of en-bloc TURBT in a Public Teaching Hospital.</u> <u>David Armany</u>

PURPOSE Bladder cancer prognosis and management rely on accurate pathological staging, with detrusor muscle presence in the specimen representing an important aspect of a quality TURBT. En bloc resection has been proposed to provide a better specimen for pathological examination and reduce tumour seeding

but is not commonly performed. This study assessed the feasibility and pathological outcomes of en bloc TURBT for appropriate tumours at our centre. METHODOLOGY We performed a prospective, nonrandomised study that recruited patients diagnosed with bladder cancer in one tertiary public teaching hospital in Sydney, Australia. Inclusion criteria were: (I) Tumour size <5cm, (2) three or fewer lesions, (3) no radiological/clinical concerns of muscle/ureteric involvement, and (4) deemed appropriate by the supervising consultant at time of procedure. The primary outcome was the Prescence of detrusor muscle at final histology. Secondary outcomes include perioperative complications. RESULTS In 15 patients who underwent en-block TURBT between February and June 2024, 24 lesions were removed. Mean tumour size was 2.47cm 🛛 1.25 (mean 🗆 std). 11/15 (n=73%) specimens resected contained detrusor muscle. Two patients required an indwelling urethral catheter for 1 week postoperatively due to extraperitoneal bladder perforation. A significant barrier encountered was the difficult in extracting the specimen with the use of large stone crushing forceps, required in 4 cases. CONCLUSION En-bloc TURBT is feasible, with an appropriate learning curve and excellent pathological outcomes for suitable lesions. Larger sample sizes are required to compare its benefits to re-resection TURBT histopathology.

2:52 pm

Uptake of Active Surveillance in favourable intermediate risk prostate cancer in Victoria: An analysis of the Prostate Cancer Outcomes Registry (PCOR) data set. Edward Risbey

2:56 pm

How rurality and socio-economic status impact prostate cancer diagnosis, treatment and outcomes in Queensland Madeleine Bain

3:00 pm

<u>Redefining High-Volume Centres Based on Morbidity and Mortality After Radical Cystectomy for Bladder</u> <u>Cancer</u>

Samuel Sii

Purpose: Despite the major improvements in surgical technique and peri-operative care, radical cystectomy (RC) remains a major operative procedure with significant morbidity and mortality. Emerging evidence has shown a direct relationship between surgeon and hospital volumes and morbidity for major surgeries such as radical cystectomy, suggesting a movement towards centralization of major surgeries. We aim to evaluate the current standard for open radical cystectomy (ORC) by comparing outcomes from a moderate to high-volume center that performs at least 10 ORC annually to other higher volume centers (≥20 ORC/year). Methodology: Patients undergoing Radical Cystectomy (RC) between 2019 and 2022 were identified. Perioperative outcomes and complication rates that were categorised according to the Clavien-Dindo classification. Data obtain was compared to existing data published from other tertiary centres in Australia and United Kingdom. Results: 30-day and 90-day mortality rates were 1.85%, aligning closely with rates from New South Wales (1.8% and 3.6%) and the UK (1.58% and 2.72%). Clavien-Dindo grade I/II complication rates were lower than the UK (48.1% vs. 60.9%), and grade III+ complications were markedly reduced (14.8% vs. 31.4%). Overall post-operative complication and mortality in this study were similar when compared to outcomes from other high-volume centers. Conclusions: Morbidity and mortality remain high following radical cystectomy. Centralisation of RC to high-volume centres is recommended, in line with current guidelines. We suggest that a high-volume centre in Australia should be defined as a hospital that performs >10 RC/year to better aid the process of centralisation of RCs locally.

3:04 pm

Addressing rural cancer care inequities: an Australian institution experience with muscle invasive bladder cancer patients

Tran Ngoc An Huynh

Purpose: Neoadjuvant chemotherapy (NAC) before radical cystectomy is the standard of care for muscleinvasive bladder cancer (MIBC) due its survival benefits. Historically, uptake is suboptimal particularly in areas with limited healthcare access. This study aims to re-evaluate in a contemporary cohort the NAC and adjuvant chemotherapy (AC) uptake among rural and metropolitan patients at a tertiary institution. Methodology: We retrospectively analysed patients undergoing radical cystectomy for \geq pT2 urothelial carcinoma from 2011 to 2021. Patients were categorized into metropolitan or rural cohorts using the Modified Monash Model. Results: Among 69 patients, 46 (66.7%) were from metropolitan areas, and 23 (33.3%) from rural areas. NAC uptake was low overall, with a higher proportion of rural patients receiving NAC (26.6% vs. 10%, p = 0.21) compared to metropolitan patients. Among patients eligible for AC, a higher proportion of metropolitan patients were offered treatment compared to rural patients (91.67% vs. 61.54%, p = 0.072). However, the proportion of patients who ultimately received AC was similar between the two groups (68.18% for metropolitan vs. 50.0% for rural; p = 0.17). The primary reasons for non-receipt in the rural cohort was planning to receive therapy elsewhere (25%) whereas in the metropolitan cohort it was patient declination (22.7%). Conclusion: This study demonstrates that rural status does not significantly affect chemotherapy uptake or survival outcomes. However, rural patients continue to face unique barriers to accessing quality cancer care. Ongoing efforts are essential to further ensure equitable access to guideline-based treatment for MIBC for all patients.

3:08 pm

<u>Hidden Calyceal Diverticulum – Using 3D Modelling for Surgical Planning and Treatment</u> <u>Shravankrishna Ananthapadmanabhan</u>

3:12 pm

<u>Three-dimensional virtual reconstruction guides robotic-assisted partial nephrectomy in a horseshoe kidney</u> <u>Zoe Williams</u>

Purpose Horseshoe kidneys pose operative challenges due to atypical renal anatomy and vasculature. This study demonstrates how three-dimensional (3D) virtual reconstruction comprehensively represents renal and tumour anatomy to inform operative approach in robotic-assisted partial nephrectomy (RAPN) in horseshoe kidneys. Methodology Case selection included patients at Nepean Hospital with horseshoe kidney tumours amenable to RAPN. 3D virtual reconstruction of the kidney was generated from CT images and consulted pre-operatively. RAPN was performed with the da Vinci® Surgical System. Results A 74-yearold male with a 35 mm x 26 mm partially endophytic complex left upper pole horseshoe kidney cyst and no evidence of metastatic disease was selected for this study. The 3D virtual reconstruction revealed renal vasculature of two left renal arteries and one left renal vein dividing proximally, which informed the dissection approach and decision to clamp all three vessels prior to tumour excision. The 3D reconstruction revealed tumour proximity to the pelvicalyceal system allowing preparation for a collecting system defect following excision. The 3D reconstruction outlined the vascular supply of the isthmus and right side of the kidney as arising from the aorta inferior to the inferior mesenteric artery to facilitate safety planning in the event of haemorrhage. The tumour was classified as grade 2 clear cell renal cell carcinoma of stage pTla. Clear surgical margins were achieved. Conclusion The 3D virtual reconstruction provided a more comprehensive visual representation of horseshoe kidney anatomy than CT. 3D virtual reconstruction facilitates precise tumour excision and minimises devascularisation of the renal parenchyma.

1:30 pm - 3:30 pm EMERGENCY LAPAROTOMY - WHAT HAVE WE LEARNT THROUGH ANZELA/NELA?

Scientific Session - General Surgery, Rural Surgery, Trauma Surgery - Meeting Room C4.5

1:30 pm <u>Trauma Laparotomy</u> <u>Mary Langcake</u>

1:55 pm <u>NELA – A UK experience of Laparotomy Audit</u> <u>Christian Macutkiewicz</u>

The National Emergency Laparotomy Audit (NELA) was launched in England and Wales in 2013 on the back of data showing mortality figures of 15% and high complication rates together with disparities in care across the country. The aim was to improve the quality of care for Emergency Laparotomy patients but collecting and analysing data to guide quality improvement across the Nation. Over 30,000 emergency laparotomies were performed in the first year and a wide variation in outcomes between hospitals highlighted a need for better standards and care pathways. This benchmarked performance nationally and locally and provided data to improve decision-making, preoperative care and postoperative outcomes. It promoted adherence to evidence-based standards, especially timely surgery and consultant involvement and best-practice tariffs gave incentives to hospitals to improve performance. Delays to surgery, inconsistent consultant input and variation in access to post-operative critical care were highlighted as the biggest challenges but mortality has dropped to below 9% over the 12 years it has been active. NELA has significantly improved the landscape of emergency laparotomy care. It serves as model for national audit-led quality improvement and ongoing participation and engagement are essential for sustained progress.

2:20 pm

Zealand Emergency Laparotomy Audit experience Robert Aitken

Purpose To describe the development of near real time state based Quality Improvement (QI) reports by the Australian and New Zealand Emergency Laparotomy Audit (ANZELA). Methodology ANZELA is a Clinical Quality Registry (CQR) that collects data on evidence-based care for Emergency Laparotomy (EL). Data is entered into REDCap in near real time, cleaned and analysed monthly using funnel plots and Statistical Process Control (SPC) charts that show identifiable hospital participation. Hospitals and health departments now receive a state-based report that show these and additional data each month. Results Of the estimated 120 hospitals undertaking ELs, 51 (43%) participate. There is no EL classification code so a SPC chart of ELs undertaken is used as a surrogate measure of case ascertainment. Fully engaged hospitals showing less monthly variation so likely more complete case ascertainment. The funnel plots show wide inter-hospital variation in care compliance and data completeness. There is also variation within individual hospitals for different care standards. Some hospitals have embraced the feedback and improved both their compliance and data completeness. Conclusion ANZELA is now providing near real time state based QI data each month. This can be used by hospitals and health departments to address inter-hospital variation and will meet the requirements of the EL Clinical Care Standards being developed. However, participation and data completeness falls far below the recommended 95% minimal standard. This will challenge interpretation, a problem common to all Australian CQRs. There is an urgent need to address the very poor participation in Australian CQRs. This will likely require mandatory participation in priority CQRs.

2:45 pm

Developing a national standard for emergency laparotomy in Australia - Australian Commission on Safety and Quality in Health Care

Phoebe Holdenson Kimura

Clinical Care Standards play an important role in the Australian health care system, guiding the delivery of appropriate care and reducing unwarranted clinical practice variation for various health conditions and procedures. Clinical Care Standards identify and define the care people should be offered or receive, regardless of where they live in Australia. The Australian Commission on Safety and Quality in Health Care is developing a Clinical Care Standard for emergency laparotomy, prompted by ANZELA-QI reports and other data showing wide inter-hospital variation in processes and outcomes of care for emergency laparotomy patients. Development of the Clinical Care Standard commenced this year, and it is due for release in 2026. This session will discuss Clinical Care Standards and how they work to bring about improvements in care, with a focus on the development process for the Emergency Laparotomy Clinical Care Standard and the opportunities available to provide input into the standard's development.

3:00 pm Discussion

1:30 pm - 3:30 pm Evolving treatment paradigms in Thyroid Surgery

Scientific Session - Endocrine Surgery - Meeting Room C4.11

1:30 pm Advancing Endocrine Surgery: Innovations in Technique and Therapeutics Mark Sywak

1:50 pm

Radiofrequency ablation as non-invasive treatment in thyroid disease – Current status and future perspectives

Brian Lang

Ultrasound-guided radiofrequency ablation (RFA) as a non-invasive treatment has once been described as one of the most disrupting technologies in the field of thyroid surgery. It has been increasingly being used as an alternative to surgery in patients with single, symptomatic benign thyroid nodule. The agenda of the present talk are first to describe how RFA is being carried out as an outpatient procedure and to examine the current evidence supporting the use of RFA. Also, the talk will be discussing the current role and limits of RFA as a non-invasive treatment for low-risk papillary thyroid cancers and other non-nodular thyroid diseases and what role RFA may play in the future from an endocrine surgeon's perspective.

<u>New concepts in the surgical pathology of endocrine organs – Thyroid</u> <u>Anthony Gill</u>

In the fifth edition 2022 classification several changes have been introduced into the classification of thyroid neoplasia. These include replacement of the pathological term 'multinodular goitre' with the term 'thyroid follicular nodular disease' in recognition that many of the nodules are neoplastic. The term 'Hurthle cell' has been replaced by the term 'oncocytic'. In addition to poorly differentiated 'insular' carcinoma, a new class of thyroid neoplasia with intermediate risk between anaplastic and low grade carcinoma of follicular cell origin has been introduced. This group of tumours termed 'high grade differentiated thyroid carcinoma' represents a parallel group to poorly differentiated insular carcinoma and current thinking is that treatment paradigms for the two entities should be similar.

2:50 pm Discussion

1:30 pm - 2:00 pm KEYNOTE LECTURE - DR SHANNON THOMAS (SYDNEY, AUSTRALIA)

Keynote Lecture - Vascular Surgery - Meeting Room C3.6

1:30 pm <u>Amputation Resistance: Pedal Arterial Reconstruction versus Deep Venous Arterialisation</u> <u>Shannon Thomas</u>

1:30 pm - 2:00 pm KEYNOTE LECTURE - DR STEVEN WEXNER (WESTON, USA)

Keynote Lecture - Colorectal Surgery - Meeting Room C4.8

1:30 pm Importance of Standards in Rectal Cancer Care Steven Wexner

1:30 pm - 2:00 pm KEYNOTE LECTURE - Dr Andreas Karakatsanis (Uppsala, Sweden)

Keynote Lecture - Breast Surgery - Meeting Room C4.9 - Meeting Room C4.10

1:30 pm <u>Magnetic guidance in breast cancer surgery: 10 years of trials filling the puzzle</u> <u>Andreas Karakatsanis</u>

1:50 pm Discussion

1:30 pm - 2:00 pm KEYNOTE LECTURE - PROFESSOR LORENZO FERRI (MONTREAL, CANADA)

Keynote Lecture - Upper GI Surgery - Meeting Room C4.6 - Meeting Room C4.7

1:30 pm

ESD & surveillance vs. oesophagectomy for TIb adenocarcinomas

Lorenzo Ferri

An evidence based approach to early malignancies of the esophagus will be discussed - including endoscopic resections, hybrid approaches, and when to invoke surgical resection.

1:30 pm - 3:30 pm Nutrition

Scientific Session - Bariatric Surgery - Meeting Room C3.3

1:30 pm Very low calorie diets Hannah Nelthorpe

1:40 pm <u>Micronutrients</u> <u>Nazafarin Zarshenas</u>

1:50 pm

Healthier Patients, Sharper Outcomes Busting Nutrition Dogma for Surgical Success Paul Mason

2:30 pm

Investigating the role of the gut-brain axis in the reduced preference for sweet and fatty foods after sleeve gastrectomy and Roux-en-Y gastric bypass.

Rosalind Walmsley

Purpose: Patients report a reduced preference for sweet and fatty foods after bariatric surgery. The mechanisms underlying this change in food preference are currently unknown. Methodology: Taste preference testing was performed in mice randomised to sleeve gastrectomy (SG) or sham surgery and followed by RNA sequencing and gPCR analysis of the small intestine. Immunohistochemical expression of neural c-Fos was also performed. A longitudinal clinical study assessed food preferences, weight loss, and metabolic markers after diet-induced weight loss, and SG or Roux-en-Y gastric bypass (RYGB). Results In mice, SG reduced 24-hour intake of glucose (mean SG 18.0g, mean sham 23.6g, p=0.016) and intralipid (mean SG 16.1g, mean sham 22.0g, p<0.001) but not standard chow (mean 2.8g both groups, p>0.05). SG mice were protected from progressive weight gain of up to 9% seen in the sham group. Transcriptomics revealed upregulation of the vagal afferent neurotransmitter cholecystokinin in the jejunum of SG mice. Expression of selected gut taste receptors was unchanged on qPCR. Increased neural activation was seen in reward regions but not taste regions in SG mice. Interim results from the clinical study suggest that bariatric surgery, but not diet-induced weight loss, leads to changes in food preferences. Conclusions SG reduces intake of sugars and fats, but not regular diet, in mice. This is associated with a neural activation pattern and intestinal genetic changes suggestive of altered vagal signalling and increased sensitivity to the rewarding-value of food. These changes broaden our understanding of how bariatric surgery facilitates sustained weight loss.

2:40 pm <u>Australian dietary guidelines</u> <u>Linda Tapsell</u>

3:05 pm Discussion

1:30 pm - 3:30 pm Robotic HPB Surgery in 2025 and beyond

Scientific Session - HPB Surgery - Meeting Room C4.4

1:30 pm Liver Resections Charles Pilgrim 2:00 pm <u>Pancreatic Resection</u> <u>Shinn Yeung</u>

2:30 pm Setting up a General Surgery programme and cross collaboration Craig Lynch

3:00 pm

<u>Financial aspects of robotic surgery in Australia</u> <u>Andrew Spillane</u>

The prevalence of robotic-assisted surgery (RAS) and patient demand for access is accelerating internationally and in Australia, with an array of soft-tissue and orthopaedic robotic platforms now available. Hospitals and health services are recognising that RAS programs are an enabler for improving clinical outcomes and patient experience, that in turn attract and retain surgeons and patients to their service. While the benefits for patients and surgeons of having access to RAS program are demonstrable, the financial risks are notable for hospitals and health services. These include a large initial investment, the complexity and operating cost of RAS programs and lags in government and health insurer funding models reflecting the profile of costs and benefits of RAS. Successful RAS programs overcome these financial risks through analysis, governance, and reporting clinical, financial and operating metrics to drive continuous improvement. RAS programs that are high volume can amortise the costs of initial investment effectively. In combination with effective governance and continuous improvement, RAS program operating costs can be reduced to achieve a cost per procedure that is equal to or less than the reimbursement provided by funding models. Measuring and reporting clinical, financial and operating metrics can achieve modifications to funding models over time, that align them to the cost profile of an RAS program. While the financial risks of establishing and operating an RAS program are significant for hospitals and health services, programs that are appropriately governed, high-volume, cost-efficient and report leading clinical, financial and operating outcomes will be financially sustainable.

1:30 pm - 2:00 pm The Herbert Moran Lecture - PROFESSOR JOHN COLLINS (AUCKLAND, AOTEAROA NEW ZEALAND)

Named Lecture - Surgical Education, Women in Surgery, Surgical History - Meeting Room C4.1

1:30 pm

Breaking Barriers: The Evolution of Surgical Education for Women John Collins

1:30 pm - 2:00 pm The James Pryor Memorial Lecture

Named Lecture - Medico-Legal - Meeting Room C4.3

1:30 pm

<u>Catching up on recent decisions: The latest in breach of duty, causation and other issues</u> <u>Antonia Quinlivan</u>

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2:00 pm - 3:30 pm Colorectal Cancer 2:00 pm <u>MRI in rectal cancer</u> <u>Matthew Rickard, Peter Lee, Jessica Yang</u>

2:25 pm <u>TNT, immunotherapy and long wait in colorectal cancer</u> <u>Jodie Ellis Clark, Stephen Clarke</u>

2:50 pm <u>CME – Should we do it routinely?</u> <u>Satish Warrier</u>

3:05 pm <u>New advances in Peritonectomy</u> <u>David Morris</u>

Peritonectomy/HIPEC has come a long way, we have positive RCTs in colorectal, gastric, ovarian, peritoneal disease and T4 CRC. We have refined indications, improved outcomes and much more data. Our St George Hospital CRS database has over 2000 procedures. PCI remains extremely prognostic in CRC with median survival for PCI <10 being 56m, 10-15 = 17m. In redo CRC, our median survival is 56m. Low grade appendix 201m and high grade 49m. EPIC in appendix is 248m vs 104m without. Redo in appendix is 189m low grade and 69m high grade. There is lots more to do.

3:20 pm Discussion

2:00 pm - 3:30 pm Innovation In Breast Reconstruction

Scientific Session - Breast Surgery - Meeting Room C4.10 - Meeting Room C4.9

2:00 pm Robotic assisted nipple sparing mastectomy Hyung Seok Park

2:25 pm Sensation Preservation in Nipple and Skin Sparing Mastectomy Joseph Dusseldorp, Cindy Mak

2:45 pm 3D printed scaffold-based soft tissue regeneration in breast reconstruction Owen Ung

3:05 pm

<u>A registry-based cohort study comparing mesh/matrix outcomes from the Australian Breast Device Registry</u> <u>Gillian Farrell</u>

Purpose: The use of acellular dermal matrix (ADM) and surgical mesh is commonly used in Australia in patients undergoing breast reconstruction post-mastectomy. These materials are promoted as providing structural support, integration with surrounding soft tissue, and reduction in implant malposition. This study aims to investigate revision outcomes of reconstruction using three ADM/Mesh types (Flex®/TiLOOP®/Veritas®) and no ADM/mesh (comparator). Methodology: A registry-based cohort study of ADM/Mesh use in post-cancer/risk-reducing direct-to-implant (DTI) and two-stage (TS) procedures in Australia between 2015-2021 captured in the Australian Breast Device Registry. The revision rate for each ADM/Mesh was calculated and compared with procedures with no ADM/Mesh. Data includes descriptive patient and procedure characteristics and time-to-revision data, presented as crude and risk-adjusted survival analysis. Results: A total of 12,233 cases (6,415 DTI and 5,818 TS) were analysed. The crude unadjusted all-cause revision incidence at 5-years in DTI registrants was: 22.7% Veritas®, 21.0% Flex®, 17.4% TiLOOP® and 18.0% no ADM/Mesh. In contrast for TS procedures the revision incidence was 23.5% TiLOOP®, 22.7% Veritas®, 18.7% Flex® and 20.0% no ADM/Mesh. The most common complications associated with revision are malposition, capsular contracture, deep wound infection, seroma and haematoma. Risk adjusted

comparisons will be presented at the conference. Conclusion: Preliminary analysis suggests the use of ADM/Mesh in DTI breast reconstruction does not reduce the incidence of revision, although this is often the justification for their use. This should reinforce the importance of judicious decision-making regarding use of ADM/Mesh in breast reconstructive surgery with implants.

3:15 pm Discussion

2:00 pm - 3:30 pm Living with Pain and its Management

Scientific Session - Pain Medicine & Surgery - Meeting Room C4.3

2:00 pm Radiofrequency Blockade for spinal pain David Manohar

2:20 pm <u>Updated College Statement on Medicinal Cannaboids</u> <u>Dilip Kapur</u>

2:40 pm Atypical Analgesics Michael Davies

Chronic pain can be difficult to treat adequately, with many patients obtaining limited benefit from existing therapies or developing intolerable side effects. Palmitoylethanolamide (PEA), low dose naltrexone (LDN), ketamine and medicinal cannabis are recent additions to the pharmacological options for treating chronic pain. Stimulants may also have a place.

2:55 pm

<u>The Accuracy and Reliability of Patient-Reported Opioid Consumption Following Surgical Fracture</u> <u>Management</u>

James Bilbrough

Purpose: Postoperative opioid use is commonly determined by patient-report, however the accuracy of this measure is unclear. We aimed to determine the accuracy and reliability of patient-reported daily opioid consumption up to day 7 and over weeks 1, 2 and 3 following hospital discharge. Methods: This was a secondary analysis of a randomised trial which tested the comparative effectiveness of two opioid regimens. A consecutive sample of 120 participants underwent surgical fixation and were randomised to treatment groups upon discharge. Participants' daily opioid consumption was recorded by patient self-report and the quantity of returned pills in blister packs during the treatment period. Intraclass correlation coefficient (ICC) and Bland-Altman plot were used to assess the agreement between each collection method. Results: Records with complete patient-reported daily opioid consumption and returned blister packs were included in the analysis (81 of 120). For day 1 post-discharge, the ICC between patient-reported opioid consumption and consumption determined by blister-pack countback was 0.730. From days 2 to 7, the ICC was consistently greater than 0.8, and the mean difference was consistently less than half a tablet. For week 1 overall, the ICC was 0.904, and the mean difference was -0.4 tablets. For weeks 2 and weeks 3, the ICC was 0.953 and 0.884, respectively. Conclusion: Patient-reported consumption was a reliable and accurate measure of opioid consumption following hospital discharge. Daily consumption demonstrated less reliability and accuracy during the first 24 hours (day 1) which improved overtime. Although patients tended to under-report use, this difference was not seen as clinically meaningful.

3:10 pm

Examining the evidence and ethics of opioid dispensing limits for surgical patients Justin Hunt

2:00 pm <u>An algorithm on complex limb salvage</u> <u>Samantha Khoo</u>

2:15 pm Deep Venous Arterialisation, Technical lessons learned along the way Vivienne Moult

2:30 pm Limb salvage clinic Manar Khashram

2:45 pm <u>An international perspective on endovascular management of CLTI</u> <u>Nicole Ilonzo</u>

3:00 pm Amputation Prevention in NSW Ramon Varcoe

3:15 pm Discussion

2:00 pm - 3:30 pm Tracing our roots, the heritage and legacy of our College

Scientific Session - Surgical History - Meeting Room C4.1

2:00 pm Founding of the College Elizabeth Milford

The first official meeting of the College was in Dunedin on 5 February 1927, when the first Council was declared, and Sir George Syme was confirmed as President. This brief paper discusses why the foundation of the College was not an easy process rather the evolution of a complex series of proposals, and negotiations. A Surgical Association of Melbourne had been formed in 1920 and this consisted primarily of surgeons from the main teaching hospitals. At the Surgical section of the British Medical association in 1920, Louis Barnett proposed a body to raise surgical standards and recognize surgical expertise. A watered-down version of the proposal was eventually accepted but opposition was fierce. Henry Newland famously called the proposal 'A Dagger in the heart of the BMA'. However, all was not lost, after 1924, dedicated individuals such as Hugh Devine and others worked against the odds to create an Australasian surgical college. Their efforts have allowed us to celebrate our centenary in 2027.

2:15 pm

Tracing our roots; surgeons, surcoats, and symbols Su Mei Hoh

'Tracing our roots; surgeons, surcoats, and symbols.' In 'The Mantle of Surgery', a history of the first 75 years of the Royal Australasian College of Surgeons, the author, Professor Wyn Beasley, designated Chapter 3 as 'Trappings'. He utilised this term to describe how the embryonic college was able to incorporate itself under Victorian State Legislation and accordingly, then apply to the College of Arms in London to be granted 'Letters Patent': this document contains the 'blazon' defining the specifics of the Arms of the College. Subsequently the Royal College of Surgeons of England presented the Australasian College with a Great Mace as a mark of fraternal respect and affection: the Mace representing then and now the great authority of the College and its Council. This paper will outline how these 'trappings' came into being.

2:35 pm

Exploring the Royal Australasian College of Surgeons Portrait Collection Helen Laffin

This paper delves into RACS' diverse and extensive heritage collections found in the College archive and

museum. The museum collection is comprised of artworks, historic furniture, diplomatic gifts, textiles, rare and historic books and antique and some contemporary surgical instruments. The archives include private papers of eminent surgeons and records which show the development of the College. Examples mentioned will be the Sidcup collection connected to Queen Mary's Hospital which operated during World War 1. The surgeons here assisted many soldiers from Australia and New Zealand. The collection includes black and white photographs, X-rays, diagrams and medical case sheets as well as watercolours of soldiers preoperation by war artist Daryl Lindsay , and rare plaster casts used for the development of facial prosthetics. The surgical instrument collection includes Lister's carbolic spray, Syme's knife as well examples from many of the surgical specialities showing how they have evolved. Professor Archibald Watson's illustrated surgical diaries (1882-1936) share a perspective on his many overseas travels to observe of the operations of his colleagues. They are now an important historical record of surgery and medicine. The Cowlishaw collection acquired in 1943, consists of 2000 volumes of rare books dating from 1485. The early books including the incunabula are unique examples of 15th and 16th century printed books. RACS's vast and intriguing collections offer the viewer opportunities for research and help demonstrate how the discipline of surgery evolved.

2:50 pm <u>The Historical Collections at the Royal Australasian College of Surgeons</u> <u>Elizabeth Milford, Helen Laffin</u>

3:05 pm <u>Major Contributions by the College to Society – An Overview</u> <u>John Collins</u>

3:25 pm Discussion

2:00 pm - 3:30 pm Upper GI orphans & emergencies

Scientific Session - Upper GI Surgery - Meeting Room C4.6 - Meeting Room C4.7

2:00 pm <u>My favourite consult: Laryngo-pharyngeal Reflux</u> <u>Gregory Falk</u>

2:20 pm Post surgical foregut syndromes: dumping, roux stasis, blind loop & afferent limb syndrome Mohammed Ballal

2:40 pm <u>Boerhaaves – best management practice in 2025</u> <u>Mary Ann Johnson</u>

3:00 pm Oesophageal diverticulae & gastric volvulus Paul Burton

3:20 pm Discussion

03 May 2025

3:30 pm - 4:00 pm AFTERNOON TEA - SATURDAY

Catering - <u>*Cross Discipline*</u> - Hall 5

03 May 2025

4:00 pm - 5:00 pm Novel technologies and treatments in urology

Scientific Session - Urology Surgery - Meeting Room C3.5 - Meeting Room C3.4

4:00 pm

<u>Evaluating the Effect of Retzius-sparing and the Hood-technique Robotic-assisted Radical Prostatectomy on</u> <u>Preserving Continence: A Systematic Review, Meta-analysis and Exploratory Network Meta-analysis</u> <u>Siyu Huang</u>

Postoperative incontinence is a significant complication following radical prostatectomy, driving the development of new techniques to improve continence rates. This study compares Retzius-sparing (RS), hood-technique and the standard robotic-assisted laparoscopic prostatectomy (RALP), assessing functional, oncological, and perioperative outcomes. A systematic review was performed in accordance with PRISMA guidelines. The primary outcome was the postoperative social continence rate (0-1 pads/day) at 12 months. Secondary outcomes included postoperative social continence at other time points, the positive surgical margins (PSM), biochemical recurrence (BCR) at 12 months, and other perioperative measures. A metaanalysis was conducted to assess RS versus standard RALP. An exploratory meta-analysis was performed to compare the hood-technique against standard RALP. Additionally, a network meta-analysis (NMA) was performed to compare these three techniques. The meta-analysis included 24 studies comparing RS-RALP against standard RALP and 4 studies assessing hood-technique against standard RALP, covering 5561 patients. In comparison with the standard RALP, RS-RALP demonstrated a significantly higher rate of social continence at 12 months (Risk ratio (RR) = 1.17, 95% CI 1.10 to 1.23), the hood-technique also demonstrated similar results at 12 months (RR = 1.24, 95% CI 1.13 to 1.37). Both RS-RALP and hood-technique RALP are associated with a higher continence rate. A direct comparison between hood-technique RALP and RS RALP is recommended to determine which one provides superior functional outcomes.

4:04 pm

mpMRI guided biopsy effect on NCCN risk stratification between biopsy and radical prostatectomy Peter Stapleton

Introduction: Prostate biopsy results are crucial for guiding patient care, but significant discordance exists between biopsy histology and final radical prostatectomy (RP) pathology. This discordance can lead to mismanagement, missing clinically significant cancer, and delaying treatment. Advances such as pre-biopsy multiparametric MRI (mpMRI) have improved risk stratification and enabled targeted biopsies. Despite multiple reviews on MRI-targeted biopsies, upgrading remains a concern. Aim: Assess the impact of prebiopsy MRI on changes in NCCN risk stratification. Methods: A retrospective audit of 2,994 men with nonmetastatic prostate cancer diagnosed between 2010-2019 who underwent RP within a year without alternative treatment was conducted using the South Australia Prostate Cancer Clinical Outcomes Collaborative registry. Histological grading between biopsy and RP was compared, analyzing upgrading/downgrading rates in patients with and without pre-biopsy MRI. Data on confounding variables (age, PSA, time to RP, T-stage, number of cores, prostate size, tumor volume, procedure type) were included. Results were assessed using cross-tabulation and uni-/multivariate logistic regression adjusting for confounders. Results: On univariate analysis, pre-biopsy MRI significantly reduced upgrading of pathology (p=0.026, OR 0.83, CI 0.71-0.98) and NCCN risk stratification (p=0.049, OR 0.82, CI 0.64-1.01). However, this significance was lost after adjusting for confounders. Conclusions: Pre-biopsy MRI did not significantly impact NCCN risk stratification when accounting for multiple variables. Upgrading at prostatectomy remains a key consideration, influencing treatment decisions and patient counseling.

4:08 pm

Seeing Beyond the Surface: The Transformative Role of Endoluminal Ultrasound and Optical Coherence Tomography in Ureteric Diagnostics Samuel Sii

4:12 pm

4:16 pm

<u>Blockchain – is it the future tool for digital healthcare and urology?</u> <u>Sulleyman Felemban</u>

Purpose Blockchain, a novel technology, has changed the way data is stored on the Internet. Its unique inherent feature of maintaining secure and decentralised records, protects it from changes or deletion. Other advantages include system transparency, built-in security and increased autonomy of its users. Blockchain application is well exemplified in cryptocurrencies, governance, security and education. This review aims to assess the current uses of Blockchain in Surgery, and explore potential applications in Urology. Method Systematic literature review and critical appraisal was performed, searching PubMed database for relevant Blockchain papers on Surgery, published in English, between 2003-2024. Results Our search yielded 59 results for Blockchain and Surgery, and only six for Urology. Current application of Blockchain is limited in Surgery and sparse in Urology. Main uses are in secured decentralised dataset across multi-national research centres, and personal health records (patient wallet) in parts of Europe. Conclusion Blockchain is a highly secure technology. Particularly in data decentralisation and immutability (once data entered and stored becomes permanently irreversible). Blockchain has the potential to revolutionise the digital Surgery and Urology, especially in the era of AI. Our proposed utilisations for Blockchain in Urology include: decentralised two-level secured operative consent, ureteric stent tracing, supply chain of BCG, improving electronic medical records and large-scale research, optimising surgery and complication reporting and intraoperative documentation, and universal management of low-risk prostate cancer. Widespread awareness and gradual integration of the technology is required within the healthcare system and to the public.

4:20 pm

<u>Granulomatous prostatitis masquerading as suspected prostate cancer in male in his forties on</u> <u>immunotherapy for psoriasis</u> <u>Arjun Guduguntla</u>

4:24 pm

Establishing a new robotic surgery service in a regional hospital - barriers and implementation Madeleine Bain

Introduction Robotic surgery is rapidly expanding its applications across multiple surgical specialities, however limited robotic services in regional centres is restricting patient accessibility to a new standard of care. Presented is the approach implemented at a Toowoomba public and private hospital in regional Queensland, and considerations in implementing a new robotics regional service. Approach Pre implementation requires identifying the stakeholders and a steering committee for implementation planning. This should consider business plan preparation including market and cost analysis, list management planning, equipment procurement and identification and appropriate training of the team including surgeons, surgical assistants, nursing and anaesthetics. Early implementation involves the initial integration of the new robotics service following procurement of the equipment. Reviewing and optimising theatre workflow, appropriate early patient selection and familiarising the team with new procedures and equipment with multidisciplinary training sessions will afford better flow and outcomes. Pre, intra and post operative care needs to be considered, and the importance of non-technical skills cannot be underestimated. Post implementation, the focus realigns to improving and maintaining competence and efficiency, ongoing education and simulation, expanding the team and auditing practice. Conclusions Integration of new technologies requires considered planning and teamwork to successfully implement it into regular practice. As the role of robotic surgery continues to expand across and within surgical specialities, the divide between metropolitan and regional care will continue to widen if their accessibility remains limited.

4:28 pm

The economic and environmental footprint of PrecisionPoint prostate biopsies Kylie Lim

4:32 pm

<u>The Use of Pressure Bag Fluid Irrigation During Flexible Cystoscopy Reduces Patient Discomfort.</u> <u>David Armany</u>

Flexible cystoscopy, widely used in urological practice, is better tolerated than rigid cystoscopy but can cause discomfort in men, particularly at the membranous urethra. This study investigated whether standardized pressure bag irrigation reduces procedural pain during flexible cystoscopy METHODOLOGY

Ethics approval (2023/PID00688) and trial registration (ACTRN12623000799651), was obtained. Male patients undergoing Flexible Cystoscopy at Westmead Hospital, Sydney were randomised into 3 groups: control (gravity drainage with simulated bag squeeze), pressure bag set at 350mmHg, and manual bag-squeeze. Exclusion criteria included chronic pelvic pain, history of urethral or bladder neck stenosis, use of analgesia within 24 hours, and long term IDC. Primary outcome was mean VAS pain scores post procedure, and secondary outcomes assessed using PROMIS surveys for; pain intensity (1a), pain inference (6a), and emotional distress-anxiety (4a). RESULTS 68 patients (29 pressure bag arm, 18 bag-squeeze arm, 21 control) were recruited. For the primary outcome, both the pressure bag and bag-squeeze groups reported lower mean VAS pain scores compared to the control group (1.8, 95% CI [0.97 – 2.63], and 1.9, 95% CI [0.95 – 2.85], respectively). For secondary outcomes, the pressure bag group reported lower scores for pain inference compared to the control group (1. P=0.0002, III: P=0.0001, IV: P=0.021, V: P=0.036). The pressure bag group had lower scores for overwhelming worry (P=0.023), while the bag squeeze group scored lower on uneasiness (P=0.015). CONCLUSION Standardised pressure bag irrigation reduces procedure pain and emotional distress during flexible cystoscopy, supporting its adoption as a standard of practice.

4:36 pm

Short term morbidity following open radical cystectomy

Darcy Noll

Objective This study aims to evaluate the incidence of early post-operative complications of open radical cystectomy and determine risk factors for development of complications. Methods This retrospective study included consecutive patients undergoing radical cystectomy between 2017 and 2023 at a tertiary referral centre. Post-operative complications and re-admissions within 30 days were recorded and graded according to the Clavien–Dindo classification (CDC). Pre-operative patient, biochemical and disease factors were analysed to assess for association with development of post-operative complication. Results A total of 60 patients underwent radical cystectomy, experiencing a cumulative 67 post-operative complications. 63% (n=38) patients experienced at least one complication. The most common complication was ileus (42%), followed by urinary tract infection (22%). CDC \ge 3 complications were experienced by 12% of patients. One post-operative death occurred. 17% of patients required re-admission within 28 days. None of the risk factors analysed were associated with development of complication in this cohort. Conclusion Morbidity following radical cystectomy is high. More than half of all patients experienced at least one complications were eminor, high-grade complications were experienced by 12% of patients. Further research is required to identify risk factors for complication development following radical cystectomy in the Australian setting.

4:40 pm

<u>Outcomes and Prognostic Factors in Salvage Therapies for Biochemical Recurrence in Radiorecurrent</u> <u>Prostate Cancer</u>

<u>Yajat Dua</u>

Introduction: Managing biochemical recurrence (BCR) in radiorecurrent prostate cancer remains a significant challenge, with outcomes varying across salvage treatment modalities. This study evaluates the efficacy of various salvage therapies and explores prognostic factors influencing disease progression and survival. Methods: A retrospective review was performed on 81 patients who developed BCR following primary radiotherapy and underwent salvage therapies. Local salvage treatments included salvage radical prostatectomy (n=11), brachytherapy (n=9), stereotactic ablative radiotherapy (SABR, n=8), external beam radiotherapy (EBRT, n=2), and androgen-deprivation therapy (ADT, n=21). Results: During follow-up, 39 patients experienced a second BCR, with a mean interval of 38.52 months from salvage treatment to recurrence. Repeat PSMA PET imaging revealed diverse recurrence patterns: local recurrence only (27%), local and nodal recurrence (2%), local, nodal, and distant recurrence (8%), and distant recurrence only (19%). Systemic therapy was initiated or continued in 30 patients, including androgen receptor pathway inhibitors (ARPI) in 8 cases. Conclusion: This study highlights variability in outcomes across salvage therapies, emphasising the impact of risk stratification and recurrence patterns. The integration of local and systemic therapies, especially in high-risk patients, shows potential to improve oncological outcomes. These findings support the need for individualised treatment strategies to optimise disease control and survival in radiorecurrent prostate cancer patients.

4:44 pm

A multidisciplinary model to manage the pre-operative urine list Georges Mehawed

Purpose: Elective urological procedures require pre-operative urine assessments. Coordinating this is time consuming and is usually carried out by junior doctors leading to lack of clinical exposure/work satisfaction, overtime, late cancellations, and poor antibiotic management. This study evaluates the impact of delegating pre-operative urine management to clinical pharmacists to determine whether this intervention

reduces surgery cancellations, lowers financial costs, and enhances satisfaction among patients and staff. Methodology: A clinical pharmacist was recruited to coordinate and review pre-operative urine and blood tests from February to December 2022. Same period in 2021 was compared during which junior doctors managed the pre-operative urine process. Data were collected on cancellation rates, financial costs, and satisfaction levels through a survey. Results: All preventable cancellations due to UTIs significantly decreased from 13 cases in 2021 to one case in 2022. Financially, the pharmacist-led model reduced annual costs from AUD 82,821 to 76,525, resulting in a saving of AUD 6,296, and generated additional income through activity unit generation. Staff (n=28) satisfaction with the pharmacist's service was high, with 86% agree that the pharmacist should continue to perform this role and all reported that the pharmacist improved the overall service efficiency. Patient (n=26) satisfaction with the pharmacist participation was similarly favourable at 88%. Conclusion: Integrating clinical pharmacists into pre-operative care offers administrative, clinical and financial benefits. This model alleviates the workload of junior doctors and provides a scalable solution for enhancing peri-operative care in urology units.

4:48 pm

<u>AFL-related renal traumas – a 15 year Australian tertiary trauma centre experience</u> <u>Hyerin Park</u>

Purpose Australian Football League (AFL) is an uncommon cause of renal trauma. It remains underreported in the literature, with only one dedicated case series. We have thus conducted a review of AFLrelated renal traumas at our tertiary trauma centre. Methodology A retrospective review was conducted of adult patients with AFL-related renal traumas presenting to the Alfred Hospital between January 2009 and December 2024, with help from the Alfred Health Trauma Registry. Basic demographics, management, and 30 day mortality were recorded. Results A total of 29 patients had AFL-related renal injuries. All of these patients were male, with an average age of 25. The majority of injuries affected the left kidney (n=20) and were grade 4 (n=14) or grade 3 (n=10), with some grade 5 (n=2) and grade 2 (n=3) injuries, and no grade 1 injuries. The majority (n=23) did not require any blood transfusions, and of those requiring blood, the number of units transfused ranged from 2 to 4. The primary management strategy for the majority (n=23) was conservative, with only a minority being managed with interventional radiology (n=5) or surgery (n=1). However, there was a moderate failure rate of conservative management, with 5 patients (17%) requiring further interventions. The majority of these (n=4) were with interventional radiology for traumatic pseudoaneurysm, with only one patient requiring stenting for urinoma. The overall 30 day mortality rate was 0. Conclusion This series demonstrates a trial of conservative management remains appropriate for the majority of AFL-related renal trauma patients. However, it appears there is a higher rate of traumatic pseudoaneurysms and subsequent intervention in this group compared to renal traumas from other mechanisms.

4:52 pm

The impact of subsidisation of PSMA-PET on prostate cancer staging and evaluation in Australia Kieran Sandhu

Introduction: Prostate Specific Membrane Antigen position emission tomography (PSMA-PET) scans are available under Government subsidy as of 2022 for primary staging and re-staging of prostate cancer following biochemical recurrence (BCR). Our aim was to review the usage of PSMA-PET in Australia following subsidisation. Methods: From July 2022 to June 2024, subsidy codes for PSMA-PET were extracted from the Medicare benefits scheme. These included codes for the primary staging, and re-staging in intermediate-high risk prostate cancer following BCR. Population-adjusted incidences were calculated using publicly available demographic data. Results: During the study period, 64,654 PSMA-PET scans were performed, and most were in men aged 65-74 years. Between 2022 and 2023, the total number of initial staging PSMA-PET scans doubled from 10,615 to 21,328 representing a rate doubling of from 81.3 to 159.4 per 100,000 men. PSMA-PET scans in BCR doubled from 5,055 to 10,550 with a rate increase of 38.7 to 78.8 per 100,000 men. The largest rise in primary staging scans occurred in QLD whilst restaging scans for BCR increased the most in ACT. During the study period, linear regression indicated a significant rise in initial staging PSMA-PET scanning and scanning for BCR (p = 0.03 and 0.04, respectively). Conclusion: PSMA-PET usage has increased across Australia since subsidisation. Contemporary literature supports the use of PSMA-PET in the staging of prostate cancer compared to Bone Scan and CT. Further work is necessary to examine the impact of MBS subsidisation of PSMA-PET on the detection of clinically significant prostate cancer in Australia.

4:00 pm

Association between gastric rhythm and reflux disease defined by simultaneous Gastric Alimetry and pH testing

<u>William Xu</u>

Purpose Abnormal gastric neuromuscular function may contribute to gastroesophageal reflux disease (GERD). We assessed if gastric myoelectrical abnormalities measured by Gastric Alimetry® body surface gastric mapping were correlated with symptoms and reflux on 24-hour pH testing. Methodology Simultaneous Gastric Alimetry was performed on patients undergoing 24-hour pH-impedance testing for investigation of possible reflux symptoms. Tests consisted of the insertion of a pH catheter, followed by a standard 4.5 hr Gastric Alimetry test and symptom logging. Data were segmented into 15-minute epochs. Results Forty subjects were recruited (mean age 46.5 years, mean BMI 25.9kg/m², 60% female): 20 undergoing pH-impedance testing (12 diagnosed with GERD and 8 symptomatic patients without GERD), and 20 matched controls. GERD patients displayed more overall unstable gastric myoelectrical activity compared with controls (Gastric Alimetry Rhythm Index [GARI]: 0.43±0.16 vs 0.61±0.20, p = 0.011), but not compared to patients without GERD (0.57±0.14 vs 0.61±0.20, p = 0.605)). Decreasing overall GA-RI was associated with increasing DeMeester score (-0.46, p=0.042). There was no temporal correlation between GA-RI and percent time in reflux on pH tests (r=0.08, p=0.182), or with heartburn severity per epoch (r=0.04, p=0.309). However, periods of decreased GA-RI were temporally associated with increased nausea (r=-0.22, p<0.001) and excessive fullness (r=-0.28, p<0.001). Conclusion Reduced gastric rhythm stability is more common in GERD patients and correlates with increased overall acid exposure, although no temporal link to heartburn was found. Reduced rhythm stability was temporally associated with nausea and fullness.

4:08 pm

The impact of local and regional analgesia on pain and opioid consumption in patients undergoing open upper gastrointestinal surgery: a network meta-analysis of randomised controlled trials Nicolas Smith

Background: Numerous perioperative analgesia techniques for upper gastrointestinal (UGI) surgery are available, but the optimal approach remains uncertain. This network meta-analysis (NMA) evaluates local and regional techniques in terms of postoperative pain and opiate consumption using randomised trials (RCT) following open UGI surgery. Methodology: A Bayesian NMA analysed MEDLINE, Embase, PubMed, and Cochrane CENTRAL databases from January 2010 until November 2023. The primary outcome was postoperative pain intensity at 24 hours. Secondary analyses included cumulative opioid consumption, nausea and/or vomiting and length of hospital stay. Results: Fifty-three RCTs (n=4,207 patients) were included, assessing epidural analgesia, intrathecal morphine, continuous wound infusion, local wound infiltration, paravertebral block, transversus abdominis plane block, and systemic opiates. Epidural analgesia was the most effective for reducing 24-hour postoperative pain (Mean Difference [MD] -0.976; Credible Interval [Crl] -0.558,-1.401)) and opiate consumption (MD -24.717; Crl -16.541,-33.355). At 48-hours, epidural analgesia was associated with postoperative pain intensity (MD -0.645; CrI -0.141,-1.148) and opioid consumption (MD -21.008; Crl -8.533,-33.658). Transversus abdominis plane blocks at 24-hours reduced pain (MD -0.730; Crl -1.229,-0.223) and opioid consumption (MD -13.048; Crl, -22.033,-4.314). Continuous wound infusion (MD -14.989; Crl -25.975,-4.066) and local wound infiltration (MD -30.381; Crl -46.045,-15.470) showed significant opioid-sparing benefits at 24 hours. Conclusion: Epidural analgesia is the most effective technique for reducing pain and opioid consumption in early postoperative care following UGI surgery.

4:16 pm

Health-Related Quality of Life following Open vs Robotic Assisted Oesophagectomy - A systematic review Aryan Kalra

4:24 pm

<u>Oesophagectomy in regional New Zealand - making the case for a low-volume centre</u> <u>Cain Anderson</u>

Purpose: Oesophageal cancer is an aggressive malignancy with poor survival outcomes. This study aimed to compare the morbidity and mortality rates of oesophagectomies performed at a regional New Zealand hospital against international benchmarks to inform the debate on centralisation of oesophagectomy services in New Zealand. Methodology: A retrospective audit was conducted on patients who underwent oesophagectomy at Tauranga Hospital between January 2014 and December 2023. Mortality and complication rates were compared with those from the Esophageal Complications Consensus Group (ECCG). Data were analyzed using R studio, and statistical significance was assessed with Fisher-Exact, Chi-Squared, and ANOVA tests. Results: Sixty-one patients were included, with a mean age of 65 years. The 30-day mortality rate was 0% (benchmark 2.4%) and the 90-day mortality rate was 1.6% (benchmark 4.5%).

However, complication rates were higher, with anastomotic leaks occurring in 16.4% (benchmark 11.4%) and Clavien-Dindo grade ≥ 3B complications in 26.2% (benchmark 17.2%). No significant differences were found when stratified by age, comorbidity, or treatment. Conclusion: This study demonstrated acceptable outcomes in a small sample of regional oesophagectomies and suggests further regional research is warranted. Other low-volume regional hospitals with high service capabilities that perform oesophagectomies alongside similar complex oncological resections may consistently achieve acceptable outcomes, supporting the continuation of regional oesophagectomy services in New Zealand. This in turn could maintain rural access to specialist services and reduce inequity.

4:32 pm

<u>Very Long-Term Outcomes Following Giant Hiatus Hernia Repair</u> <u>Mathew Amprayil</u>

Background: Laparoscopic repair of large hiatus hernias provides excellent clinical outcomes in symptomatic patients. However, recurrence is common and long-term follow-up (>10 years) is limited to small sample sizes. The aim of this study is to evaluate long-term clinical outcomes following repair. Methods: Patients who underwent surgical repair of a very large hiatus hernia (
50% intrathoracic stomach) with a minimum of 10-year follow-up were identified from a prospectively collected database. A standardised questionnaire was sent to patients to identify presence and severity of symptoms, as well as overall satisfaction. Results were compared to preoperative and short-term (<12 months) outcomes. Results: Between 2000 to 2015, 321 suitable patients who underwent large hiatus repair with a minimum 10-year follow-up were identified. 137 patients (42.7%) completed and returned the questionnaire. Follow-up ranged from 10 to 24.1 (mean 15.2) years. There was a significant improvement in heartburn (5.62 vs 2.08, p < 0.001) and regurgitation (6.77 vs 2.04, p < 0.001) severity comparing preoperative to long-term follow-up results. 90 patients (65.7%) reported ongoing use of antacid medications. Other commonly reported symptoms include: dysphagia (41.6%), increased flatulence (51.8%), bloating (34.3%) and early satiety (30.7%). 110 patients (80.9%) report no ongoing or mild symptoms. Overall satisfaction was 8.15 out of 10. Conclusion: Despite high rates of recurrence in the literature, we found laparoscopic repair of large hiatus hernia provides both an effective and sustained improvement in symptoms.

4:40 pm

<u>Utility of Intra-Pyloric Botox Injection as a Predictor for Clinical Success to G-POEM in the Management of</u> <u>Post-Surgical Refractory Gastroparesis</u>

Shabnam Islam

Purpose: Post-surgical refractory gastroparesis (PSRG) presents a significant management challenge, with no reliable predictors for the success of gastric peroral endoscopic myotomy (G-POEM). This study aims to evaluate the utility of intra-pyloric botulinum toxin (Botox) injection as a potential predictor for G-POEM success. Methodology: This retrospective study involved 24 patients with PSRG who underwent intra-pyloric Botox injection followed by G-POEM. Demographic data, comorbidities, and baseline Gastroparesis Cardinal Symptom Index (GCSI) scores were recorded. The primary outcome was the correlation between GCSI scores before and after Botox and G-POEM. Secondary outcomes included length of stay (LOS), morbidity, and re-intervention rates. Results: The study demonstrated that patients who showed significant improvement in GCSI scores post-Botox injection had a positive correlation with G-POEM clinical success (positive predictive value of 73.68%). The rate of adverse events was 37.5%, and clinical success, defined as a 1-point decrease in average GCSI scores with a 25% reduction in at least two sub-scores, was achieved in 75% of patients at the 12-month follow-up. Conclusion: Intra-pyloric Botox injection appears to be a reliable predictor of G-POEM success in treating PSRG, especially in patients with a tight pyloric sphincter. The findings support further investigation of Botox as a pre-treatment predictor for G-POEM outcomes.

4:00 pm - 5:00 pm Rate my bariatric surgery

Scientific Session - Bariatric Surgery - Meeting Room C3.3

4:00 pm <u>Sleeve gastrectomy</u> <u>Vytauras Kuzinkovas</u>

4:10 pm <u>Banded bypass</u> <u>Michael Talbot</u>

4:20 pm <u>Robotic SADI</u> <u>Jason Free</u>

SADI procedure and it's variants provide more weight loss and better comorbidity resolution than Sleeve Gastrectomy alone. SADI can avoid many of the long-term problematic issues associated with gastric bypass. This presentation demonstrates surgical techniques including robotic surgery, and discussion on the reasons for this choice of procedure.

4:30 pm

Mini-bypass OAGB- My Technique Craig Taylor

This video presentation outlines the technical aspects of how I perform a One Anastomosis Gastric Bypass based on experience of more than 1000 cases. The importance of restoring hiatal integrity, and creation of a long, thin gastric pouch are emphasised and demonstrated as key components to minimising the risk of biliary reflux. A single layer, hand sewn gastroentostomy is demonstrated as a means of performing the anastomosis with a very low incidence of leak, haemorrhage, marginal ulceration or stenosis. The importance of the pouch emptying preferentially into the common channel rather than the BP limb is emphasised in order to avoid post prandial discomfort and nausea. Finally the case for a 150cm biliopancreatic limb in all patients (rather than the more common 200cm or longer) in order to minimise nutritional deficiencies whilst still maintaining excellent weight loss and co-morbidity resolution is presented.

4:40 pm <u>Robotic bypass</u> <u>Kiron Bhatia</u>

4:50 pm Discussion

4:00 pm - 5:00 pm Research Papers

Scientific Session - Surgical History - Meeting Room C4.1

4:00 pm

Ethics in Aesthetics: The Influence of Ivo Pitanguy Collette Massy-Westropp

Introduction: Ivo Pitanguy was a renowned Brazilian plastic surgeon and widely considered as a pioneer of modern aesthetic surgery. He is celebrated for his contributions to the advancement of facial plastic surgery and body contouring. This research paper explores Pitanguy's contributions to modern plastic surgery, focusing on his innovative techniques, his impact on the aesthetic surgery landscape, and his broader legacy in surgical education and ethical practice. Methods: a literature and historical archive review was undertaken. Results: Throughout his career, he uniquely emphasized the ethical and psychological dimensions of surgery, advocating for procedures that enhance a patient's well-being rather than solely focusing on superficial beauty. In his practice, Pitanguy championed the importance of patient consent, transparency, and informed decision-making. Pitanguy was also committed to training the next generation of surgeons, founding the Ivo Pitanguy Institute in Rio de Janeiro, which became a prestigious training centre. Conclusions: This presentation highlights how Pitanguy transformed the science and the perception of cosmetic surgery. His impact on the ethics of aesthetics resonates in modern plastic surgery and is reflected in the new Australian cosmetic surgery guidelines. References 1.Bhattacharya S. Dr. Ivo Pitanguy: Strived for a 'human right to beauty'. Ind J Plast Surg. 2016;49(3):300-301. doi:10.4103/0970-0358.197240 2.Khoo L. Plastic surgery founding father Ivo Pitanguy on life, learning and legends – remembering a giant. PMFA Journal. July 30, 2020. https://www.thepmfajournal.com/features/features/post/plastic-surgeryfounding-father-ivo-pitanguy-on-life-learning-and-legends-remembering-a-giant

4:06 pm

Snips, Snares, and Lasers: The Evolution of Tonsillectomy

<u>Tony Lian</u>

Purpose: This review aims to highlight key advances in surgical techniques and public health shifts

influencing tonsillectomy practices, evolving from a painful operation to a streamlined outpatient procedure. Methodology: A literature review summarised the historical development of tonsillectomy, focussing on surgical methods. Results: Tonsillectomy began with blunt removal techniques described by Cornelius Celsus in Ancient Rome, using a finger, followed by vinegar wash and medication pastes to reduce bleeding. By the sixth century, Aetius of Amida introduced a hook and knife for greater precision. In 1564, European surgeons improved techniques by placing a thread around the uvula and cutting it off by strangulation. Improved understanding of asepsis in the early 20th century led to new tools. Samuel Whillis and Frederick Pybus described the enucleation of tonsils using the reverse guillotine in 1910. During this era, tonsillectomy significantly increased in popularity, driven by beliefs that removing tonsils improved general health, with emerging epidemiological evidence in the 1940s linking tonsillectomy and bulbar poliomyelitis. Calls for "universal tonsillectomy" were met with resistance from surgeons including T.B. "Tubby" Layton, who emphasised conservative clinical judgement. Tonsillectomy rates declined as antibiotic management improved. Samuel Crowe further developed the Crowe-Davis mouth gag, to retract the tongue and direct anaesthetic agent to the laryngopharynx. In the late 20th century, electrocautery and coblation significantly improved precision. Conclusion: The extensive history of tonsillectomy demonstrates the evolvement of surgical techniques and shifting medical perspectives over centuries.

4:12 pm

The American College of Surgeons Minimum Hospital Standardization Programme: the College centenary is an opportune moment to finally deliver the vision of its founders

Robert Aitken

The American College of Surgeons Minimum Hospital Standardization (MHS) Programme was central to its foundation and subsequent growth. Its significance was second only to the election of Fellows. At its centre was the monthly staff meeting. In the 1920's it formed the basis of several Clinical Quality Registries (CQR). It evolved into the Joint Commission on Accreditation of Hospitals, now the Joint Commission. The development of MHS overlapped the years before the foundation of the College of Australasian Surgeons. It was well known to both surgeons and governments. Between 1920 and 1927 the Medical Journal of Australia included over 20 related articles arguing that if 'possible in America, it must be possible in Australia'. The four month visit of its Director, Malcolm MacEachern, in 1925 commenced only three weeks after the letter was sent to potential College Founders. His visit has been overlooked. In 1928 the College Council wrote state premiers suggesting MHS be adopted across Australasia. The letter reflected that the MHS was part of the then College constitution. There is no record of a reply. Devine spent a month at the Mayo in late 1924 and the monthly staff meeting, led by William Mayo a long term member of the MHS committee, had a profound effect. Devine was there at the same time as James Learmonth who introduced the same staff meetings on his return to the Edinburgh Royal Infirmary. These meetings evolved into the Australian and New Zealand Audit of Surgical Mortality, which thus has a direct linage to the MHS. Given the current interest in Australian CQRs, the College's upcoming Centenary is an appropriate time to reappraise a missed opportunity and so fulfill the aims of its Founders.

4:18 pm

The Fastest Knife in the West End and the History of Limb Amputations Roland Deek

The earliest evidence of surgical amputation of a limb dates back about 31,000 years ago, whereby a young adult from the island of Borneo had the distal third of their left lower leg amputated. Barber surgeons attempted to improve this procedure in the sixteenth century, primarily through decreased operative times and improved surgical instruments. On average, barber surgeons performed leg amputations in 3-4 minutes. Dr Robert Liston famously performed amputations of the leg in less than a minute, with his fasted amputation taking only 28 seconds. This earned him the title of the "fastest knife in the west end". Some of the early surgical developments included antisepsis (Lister), vessel ligatures (Paré), and the application of a tourniquet (Morell). The English surgeon Dr Lowdham was the first to describe the "flap amputation", which involved the use of a soft-tissue flap for a tension-free closure over the bone. The introduction of anaesthesia in the 19th century revolutionised surgery, and this allowed for further developments in surgical approaches. Significant advancements in post-operative management have also contributed to reduced complication rates and improved functional outcomes. Such outcomes have been aided by advancements in prostheses, which have evolved from modified crutches to highly functional prostheses with elevated sensory and motor control. The history of limb amputations demonstrates the intersection of necessity, innovation, and compassion, thus transforming it into a procedure that restores function and improves quality of life.

4:24 pm

From Tragedy to Triumph: How the Lübeck Disaster Paved the Way for BCG in Bladder Cancer Therapy Damien Gibson

The Lübeck Disaster of 1930, a public health tragedy resulting from the inadvertent administration of contaminated Bacillus Calmette-Guérin (BCG) vaccines to neonates in Lübeck, Germany, had profound implications for both tuberculosis (TB) control and modern therapeutic applications of BCG. While the incident caused significant morbidity and mortality, leading to ethical and procedural overhauls in vaccine development, its scientific legacy persists in the field of immunotherapy. The unique immunomodulatory properties of BCG, originally developed as a TB vaccine, were first illuminated during early investigations into the disaster. Decades later, this understanding catalyzed its application in bladder cancer treatment. BCG's ability to elicit a robust localized immune response became the foundation for its role in intravesical therapy for non-muscle-invasive bladder cancer, where it remains a first-line treatment. This paper explores the historical context of the Lübeck Disaster, the insights it provided into the immunological mechanisms of BCG, and how these findings have informed its safe and effective use in oncology. By tracing the trajectory from public health catastrophe to therapeutic innovation, the Lübeck Disaster underscores the importance of rigorous vaccine protocols and exemplifies how medical missteps can yield transformative scientific advancements.

4:30 pm

History of the Key Contributors in the Development of the Neck Dissection Brandon Leggett

Neck dissections for the treatment of confirmed or potential nodal metastases from head and neck cancer forms a crucial element of the surgical repertoire for a wide range of surgical disciplines. In Australia, neck dissections are performed by specialist general, plastic & reconstructive, ENT and maxillofacial surgeons. And although this procedure is relatively commonplace within the operating theatre, it is important to remember the history behind the giants who pioneered this procedure across the late 19th and early 20th centuries. First descriptions of the neck dissection emerged with prominent 19th century surgeons Billroth, Kocher, Von Langenbeck and Von Volkmann and who described different variations of the early neck dissection. Jawdynsky in 1888 produced the first well documented process for an en-bloc dissection. Following this, in the early 20th century Crile described a series of neck dissections which helped to place neck dissections on the map in surgical oncology as a procedure that was reproducible and effective in the treatment of head and neck malignancy. Moving into the 1950s, Hayes Martin in New York published a landmark paper providing the outcomes of 1450 cases of neck dissection which helped to ultimately define and cement in practice the utility of this procedure in the treatment of head and neck malignancy. Neck dissection in modern day practice forms a critical tool in the treatment of various head and neck malignancies and it is through the early foundations formed by these inspirational surgeons that patients continue to benefit from this life saving procedure. Reference Rinaldo, A., Ferlito, A. & Silver, C., 2008. Early History of Neck Dissection. Eur Arch Otorhinolaryngol, 265(12), pp. 1535-1538.

4:36 pm

Facial Transplantation Surgery: 20 Years of a Surgical Milestone

<u>James Kieu</u>

Facial transplantation, a groundbreaking field in reconstructive surgery, has emerged from advancements in tissue transplantation, microsurgical techniques, and immunosuppressive therapies. The concept of facial allotransplantation has roots in early 20th-century attempts at reconstructing complex facial injuries through Sir Harold Gillies, father of modern plastic surgery, principle of "replacing like with like". 2025 marks the 20th anniversary of the first successful facial transplant. This was performed by Dr. Jean-Michel Dubernard and his team in France on patient Isabelle Dinoire - involving transplanting the nose, chin, and mouth from a donor. This has expanded from partial to full face, with Spain performing the world's first full face transplant in 2010. As of 2020, 47 face transplants have been conducted worldwide, including two retransplants, across 11 countries and 21 medical facilities. The development of facial transplantation has been characterised by meticulous planning, innovative techniques, and multidisciplinary collaboration. Surgeons now utilise 3D imaging, virtual surgery, and extensive rehearsals to refine their approaches. This surgical innovation represents a convergence of technical skill, ethical considerations, and dramatically improves quality of life for individuals with facial disfigurements. References Khalifian, S., et al. (2014) Facial transplantation: the first 9 years. The Lancet, Volume 384, Issue 9960, 13–19 December 2014, Pages 2153-2163 Pomehac, B., et al. (2011), Evolution of indications for facial transplantation. Journal of Plastic, Reconstructive & Aesthetic Surgery, 64(11):1410-6. doi: 10.1016/j.bjps.2011.06.024

4:42 pm

Bernard O'Brien: A Trailblazer in Lymphovascular Microsurgery and Its Global Impact on the treatment of lymphedema

<u>Jake Chia</u>

Bernard O'Brien's foundation work in Lymphovascular anastomosis (LVA) microsurgery has revolutionized the treatment of lymphatic disorders. Working at the Microsurgery Research Centre at St. Vincent's Hospital

in Melbourne, he was instrumental in shaping the early evolution of lymphatic surgery. O'Brien's groundbreaking research began in the 1970s, with his early experimental studies on canine models successfully demonstrating improvements in lymphatic flow after LVA. This then paved the way for the technique to be adopted in human trials, and by 1990, he published the largest series of LVA surgeries, cementing the procedure as a key option for lymphedema. He later continued to develop techniques for vascularised lymph node transfer (VLNT) through similar canine models. Therefore, laying the groundwork for future advancements in lymphatic surgery. This presentation explores O'Brien's transformative impact on lymphovascular microsurgery, highlighting how his research, clinical work, and teaching have shaped the field. His dedication to improving patient outcomes, combined with his role as a global leader in lymphatic surgery, has set a new standard in the treatment of lymphatic and vascular disorders.

4:00 pm - 5:00 pm Research Papers and Abdominal Compression

Scientific Session - Vascular Surgery - Meeting Room C3.6

4:00 pm

Endovascular Salvage of Early Arteriovenous Fistula Failure: A Novel Approach to Restoring Haemodialysis Access

Frances Lee

Endovascular salvage offers a valuable approach to preserving autogenous arteriovenous fistulae (AVFs), the gold standard for haemodialysis access in patients with end-stage renal failure. Despite their advantages, early AVF failure remains a significant challenge, with failure rates ranging from 20–50%, commonly caused by juxta-anastomotic stenosis (JAS). This work outlines an innovative endovascular technique aimed at restoring patency and functionality in early AVF failures. The procedure is performed under regional anaesthesia in a hybrid operating suite, combining ultrasonographic and fluoroscopic imaging. Vascular access is obtained with ultrasound-guided antegrade puncture of the radial artery and retrograde puncture of the cephalic vein, followed by diagnostic fistulograms to precisely identify the stenotic segment. Recanalisation is achieved using a 0.018" wire and balloon catheters, with gentle predilation of the stenosis. The technique concludes with fistuloplasty, serial dilation to 6 mm, and the placement of a nitinol Supera stent to provide scaffolding and restore inflow. Early results suggest this method is both safe and effective, offering a practical alternative to abandoning failed AVFs. By addressing primary AVF failures endovascularly, this approach could reduce failure rates, improve patient outcomes, and optimise healthcare resources. While these findings are promising, further studies involving larger cohorts are essential to validate the long-term efficacy of this technique and establish its place in routine clinical practice. This work contributes to the growing field of endovascular solutions for vascular access challenges.

4:05 pm

Inter and Intra-Rater Reliability of Pedal Acceleration Time Measurements Philip Allan

Purpose Pedal acceleration time (PAT) is a ultrasound assessment for lower limb perfusion. It is useful in patients with digital amputations, open wounds, or non-compressible vessels, where conventional measurements may not be possible. Emerging data confirms it correlates with wound healing and amputation-free survival. However, it is unclear to what extent it can be accurately and reliably repeated. The aim of this study was to determine the inter- and intra-rater reliability of PAT measurements. Methodology Ten patients from a tertiary diabetic foot/chronic limb threatening ischaemia clinic were recruited in Oct 2023. 3 trained sonographers independently conducted PAT measurements 3 times each on 3 pedal arteries. The inter-rater reliability was assessed as the percentage contribution of raters and replicates to variability. The intra-rater reliability was quantified by the coefficient of variation. Intraclass correlation was used to summarise the combined effect of raters and repeat measures by raters. Results The contribution to variance by different raters was ≤0.4%, while as expected the variation amongst patients dominated total variation (>88.1%). Coefficient of variation ranged from 10.8-12.2%, suggesting high intrarater reliability. The intraclass correlation ranged from 0.88-0.90 indicating good to excellent reliability of PAT. Conclusion This study indicates that PAT can be reliability measured with high levels of inter- and intra-rater reliability. These small differences in PAT values are unlikely to tangibly change clinical interpretation. Future studies should seek to validate these findings in larger cohorts and assess the effect of the learning curve on the reliability of PAT measurements.

Branch Thrombus after Endovascular Treatment with Arch Branched Devices for Aortic Arch Pathologies Dhenisha Dahya

Purpose: to describe the occurrence of branch thrombosis following endovascular treatment of aortic arch pathology using an arch branched device (ABD) and to determine whether this is influenced by clinical and geometric parameters. Methodology: in this retrospective observational multi-centre study the primary endpoint was thrombus formation within a branch. Secondary endpoints were technical success, serious adverse events, early and late death, stroke, and re-interventions. Geometric measurements (tortuosity index and curvature) were determined on pre- and post-operative CT angiograms. Results: 39 patients were treated and 68 antegrade branches analysed. Thrombus was identified within 7 branches (10%) and was associated with a wider distal bridging stent diameter (median 14.0 mm [13.3, 15.3] vs. 8.7 mm [IQR 5.9]; p 1/4 .026), a higher degree of reversed tapering (4.3 mm [3.8, 5.2] vs. 1.2 mm [0.3, 3.1]; p ¼ .023), use of polyethylene terephthalate (Dacron) covered (vs. expanded polytetrafluoroethylene) bridging stents (23% vs. 2%; p ¼ .011), and higher body mass index (BMI) (32.1 kg/m2 [28.7, 36.2] vs. 25.7 kg/m2 [23.8, 29.2]; p ¼ .029), but not with pre- or post-operative tortuosity index or curvature or alterations. Technical success rate was 97%, SAEs occurred in 15 patients (38%), early and late death rates were 8% and 23% and early and late stroke rates were 5% and 23%. Conclusion: The risk of developing branch thrombosis with an ABD is considerable, especially of innominate artery branches, characterised by Dacron covered large diameter bridging stents, and in patients with a high BMI.

4:15 pm

Decisions under pressure: Validation of the Harbourview scoring system for ruptured aortic aneurysm mortality in a multi-centre New Zealand study

Philip Allan

Purpose Ruptured AAA (rAAA) requires surgeons to make rapid and complex decisions on whether or not to operate. The Harbourview Risk Score (HRS) shows promise in calculating 30-day mortality. It scores 1 point for age (>76 y), pH (<7.2), SBP (<70mmHg), and Cr (>176.8µmol/L) up to a max of 4. The aim of this study is to validate the HRS locally. The secondary aims were to assess outcomes between open (OR) and endovascular (EVAR) intervention for rAAA. Methodology A multi-centre retrospective review was performed on patients who presented to hospital with a rAAA between 2018 and 2023. Demographic, comorbidity, clinical, and biochemical data was collected. Analyses was carried out using SPSS and Prism. Results 256 patients were included (30% female, mean 75.9 years), of whom 52 (20%) underwent EVAR, 145 (57%) underwent OR, and 59 (23%) non-operatively. 30-day mortality was 17.3% in EVAR and 46.2% in OR (OR 4.1, CI 1.9-9, p<0.001). The operative group comprised of 22.3% females and the palliative group was 54.2% female. Predicted mortality by HRS was 0%, 8%, 35%, 67% for scores 0-3. No patients with a HRS 4 were provided intervention. The HRS score was a better predictor of mortality in patients undergoing EVAR with an AUC of 0.833 compared to open. There was a 2.4-fold increase in 30-day mortality with each increase in HRS point (OR 2.4, CI 1.68-3.56, p<0.001). Conclusion HRS was retrospectively validated in our multi-centre New Zealand study. It is a rapidly calculated score to risk stratify patients and can be considered as a useful adjunct for decision making. Given an improved short to mid-term survival in our setting, where possible, EVAR first strategies should be strongly considered. Long-term data is awaited.

4:20 pm

Abdominal compression syndromes - Results of asymptomatic normal subjects and scoping review of the <u>literature</u> <u>Manar Khashram</u>

4:25 pm <u>Debate: The Management of Nutcracker - Open versus Endovascular</u> <u>Andrew Lennox, Ravi Huilgol</u>

4:45 pm Discussion

4:00 pm - 5:00 pm SUPERVISION AND MENTORSHIP - TRAINING THE NEXT GENERATION OF SURGEONS

Scientific Session - <u>Trainees Association</u>, <u>Hernia Surgery</u>, <u>Rural Surgery</u>, <u>General Surgery</u> - Meeting Room C4.5

How to Mentor Adrienne Torda

Mentoring Junior Doctors: Strategies for Surgical Educators is an interactive session designed to equip surgical educators with practical skills and strategies to effectively mentor junior doctors. As mentoring becomes an increasingly important aspect of surgical training, this short session explores the unique responsibilities of mentors and how they can shape the next generation of surgeons. Participants will learn to clearly define the mentor role and distinguish it from supervising, coaching, and sponsorship. Through discussion, case studies, and interactive exercises, attendees will reflect on their own experiences, share challenges, and develop actionable techniques to support mentees in both their professional and personal growth. The session focuses on evidence-informed mentoring strategies such as setting expectations, providing structured feedback (using models like Pendleton's or SBI), and role modelling. It also highlights how to navigate common mentoring challenges, including time constraints, mismatched expectations, and managing underperformance. A key emphasis is placed on creating psychologically safe and inclusive environments that allow junior doctors to thrive. Designed for consultants, registrars, and clinical supervisors involved in surgical education, the session is grounded in real-world practice. Participants will leave with a deeper understanding of the mentor-mentee relationship and a toolkit of techniques they can immediately apply in their teaching and training roles. With a highly interactive and supportive format, this session will foster an opportunity for open dialogue and reflection, encouraging participants to commit to one tangible mentoring strategy they will take forward into their own practice.

4:25 pm <u>FATES – An Update</u> <u>Erika Polman</u>

4:40 pm <u>Choosing a mentor and how to be a mentee</u> <u>Teagan Fink</u>

Navigating surgical training without strong mentorship is a convoluted process in the continued era of the apprentice model of surgical training. However, many trainees are disillusioned by formal mentorship programs and struggle to cultivate mentor-mentee relationships. Significant barriers exist, particularly for trainees from minority groups. This talk discusses the mentor-mentee relationship in surgical training and suggests that both parties critically think about how to bring effective mentorship to all trainees.

4:50 pm Discussion

4:00 pm - 4:45 pm SYSTEMIC TREATMENT OPTIONS IN ADVANCED THYROID CANCER

Scientific Session - Endocrine Surgery - Meeting Room C4.11

4:00 pm <u>Systemic treatment options in advanced thyroid cancer</u> <u>Roderick Clifton-Bligh</u>

4:20 pm Interesting case - Systemic treatment in advanced thyroid cancer Ayanthi Wijewardene

Thyroid cancer generally has an excellent prognosis, with most patients achieving a cure through surgery and radioiodine therapy. Dedifferentiation, which results in the loss of thyroid cells' ability to uptake radioactive iodine, occurs in up to 15% of patients. Systemic therapy has improved progression-free survival in patients with radioiodine-refractory thyroid cancer and is now used in the management of progressive disease, anaplastic thyroid cancer, and in neoadjuvant settings. Molecular genetics are utilized to guide targeted systemic treatment options.

4:35 pm Discussion

Scientific Session - HPB Surgery - Meeting Room C4.4

4:00 pm

<u>Robotic Hepatopancreatobiliary Surgery in Australia: the curve begins</u> <u>Samuel Banting</u>

Introduction With the promotion of robotic approaches for hepatopancreatobiliary in recent international guidelines, Australian data regarding the uptake of robotic procedures is lacking. The aim of this study is to examine the volume of hepatopancreatobiliary surgery in Australia and its robotic case volume. Methods Data from patients undergoing robotic hepatopancreatobiliary surgery on the da Vinci platforms were obtained from Device TechnologiesTM from 2016 to 2023. The total volume of specific hepatopancreatobiliary surgical cases was taken from Statistics Australia and the Medicare Benefit Schedule data over a ten year period from 2014 to 2023. Results A total of 2,281 major hepatopancreatobiliary cases were recorded in 2023 calendar year. 793 major pancreatic resections were performed, a 41% increase over the 2014 case volume. Major liver resections totaled 1,488 cases in 2023, a 21% increase over the same period. Available robotic case volume data between 2016 and 2023 demonstrates an increase from 91 to 230 cases. The most significant rise was seen in pancreatectomies, increasing from 35 to 103 cases (294% increase). The rise in liver resections was more modest, totally only 38 cases in 2023. Finally, robotic cholecystectomy rate remains low, with an annual figure of 90 cases in 2023. Conclusion Robotic hepatopancreatobiliary surgery has begun to see an upward trend in Australia in recent years, especially amongst pancreatic surgery. The continued uptake of robotic HPB surgery, especially in the public hospital system will require dedicated training and government support to maintain pace with the rest of the world.

4:06 pm

Measuring What Matters: PROMs in Percutaneous Cholecystostomy Outcomes: A Western Australian Perspective

Shabnam Islam

Purpose: Managing difficult gallbladders in high-risk patients often necessitates percutaneous cholecystostomy (PCT), a procedure with variable outcomes influenced by patient demographics and healthcare logistics. This study explores how the Western Australian PCT cohort differs from the CHOCOLATE study population and outlines a framework for integrating patient-reported outcome measures (PROMs) to enhance outcome evaluation. Methodology: A mixed-methods survey integrating PROMs into routine follow-up for PCT patients. Survey design utilising Qualtrics was informed by a literature review. The questionnaires assess domains such as symptom control, quality of life, and functional recovery. Data collection will occur via text messages, email reminders, and phone calls to ensure robust participation. And data collection is anonymised in a password-protected Excel sheet. This methodology addresses logistical challenges unique to geographically isolated regions. Results: Preliminary findings suggest the Western Australian cohort differs significantly from the CHOCOLATE study population, particularly in logistical constraints and case complexity. The addition of PROMs is expected to provide granular insights into recovery trajectories, patient satisfaction, and unmet needs. The data will complement clinical metrics, offering a more holistic understanding of PCT outcomes in this unique population. Conclusion: Incorporating PROMs into evaluating PCT outcomes represents a paradigm shift towards patient-centered care. By addressing gaps in current assessment frameworks, this approach will provide invaluable data for tailoring interventions, improving follow-up strategies, and shaping policies for high-risk cohorts in Western Australia and beyond.

4:12 pm

Benchmarking pancreaticoduodenectomy outcomes using Australian registry data Elizabeth Lockie

Purpose Benchmarking surgical outcomes using local data is a key component of healthcare quality improvement. International consensus groups have outlined a range of benchmarks for pancreatic surgery but there are currently no national benchmarks for pancreaticoduodenectomy (PD) using Australian data. This study aimed to use existing registry data to develop benchmarks for PD in Australia. Methodology Deidentified data from Australian pancreatic cancer registries (PURPLE, UGICR) were used to develop benchmarks for surgical outcomes for patients undergoing PD for pancreatic ductal adenocarcinoma (PDAC). Established methodologies were used to determine the best achievable benchmark of care (ABC[™]) and minimum standard for low-risk cases. Results PURPLE included 602 PDAC patients from 18 hospitals undergoing PD since 2009, with UGICR data under analysis. From PURPLE, lymph node (LN) count was the only surgical outcome available to benchmark. The minimum standard benchmark LN count (n=440) was 15.9. The ABC[™] benchmark proportion of patients with LN count ≥15 (ISGPS recommendation) was 0.96. Funnel plots identified two outlier hospitals with observed LN counts worse than expected at a national level. UGICR data will be used to develop additional benchmarks. Conclusion This is the first national benchmark for PD using Australian data, with both best achievable and minimum standard benchmarks constructed. Almost all hospitals in PURPLE met ISGPS recommendations for LN count. However, there is limited surgical outcome data in Australia, restricting the capacity for benchmarking. There is a need to capture more surgical outcome data in a national clinical registry to facilitate quality improvement.

4:18 pm

Frailty and sarcopenia as prognostic indicators in patients undergoing resection for pancreatic adenocarcinoma. A retrospective, two-centre experience

Mukund Karthik

Purpose: Curative treatment for pancreatic ductal adenocarcinoma (PDAC) requires surgical resection. Proximal PDAC are typically treated with pancreaticoduodenectomy (PD), a low-volume, high-risk procedure with high morbidity and mortality. Successful surgery requires consideration of tumour biology, as well as individual patient characteristics. Sarcopenia is a clinical syndrome defined by generalised muscle wasting, and frailty is a clinical syndrome defined by decreased physiological reserve, common in the elderly. This study aimed to assess the utility of pre-operative radiologic sarcopenia and frailty assessment on short- and long-term outcomes following PD. Methodology: Radiologic assessment of Skeletal Muscle Index, and clinical Modified Frailty Index (5-mFI) (Mogal et al., 2017), were calculated for all patients undergoing PD between 2016 and 2024 in two high-volume pancreatic resection centres, and evaluated as prognostic tools in patients having undergone PD. Results: 200 patients (median age 75 years) were included. 52% were sarcopenic, and 35% were moderately/severely frail. The following will be measured and stratified based on pre-operative sarcopenic and frailty status. a)Overall survival b)Incidence and severity of post-operative complications using Clavien-Dindo scoring c)Hospital length of stay d)Re-admission rates e)30- and 90-day mortality Conclusion: Frailty and sarcopenia are easily assessable parameters, which can be evaluated pre-operatively to risk-stratify patients prior to PD. By retrospectively evaluating these measures on post-operative morbidity and mortality at two major Australian centres, it will aid surgeons to individualise patient management in the context of PDAC.

4:24 pm

Morbidity, oncological and survival outcomes of patients undergoing resection for pancreatic adenocarcinoma across four centres. Alen Brodaric

4:30 pm

<u>Outcomes of Subtotal Cholecystectomy from a Large Tertiary New Zealand Hospital</u> <u>Hannah Kim</u>

Purpose Subtotal cholecystectomy (StC) is a recognised bail-out strategy for difficult cholecystectomy. The aim of the study was to analyse technical aspects and outcomes associated with subtypes of StC. Methodology All perioperative data of patients who underwent StC at Christchurch Hospital between June 2015 to September 2023 were retrospectively identified and analysed. The subtypes were classified as reconstituting (rStC), fenestrated (fStC), and remnant posterior wall (pwStC) subtotal cholecystectomy. Results Of the 6251 patients who underwent cholecystectomy, 422 (6.8%) underwent StC, and 132 (31.3%), 115 (27.3%), 175 (41.5%) underwent rStC ,fStC and pwStC respectively. pwStC was generally associated with superior, and fStC inferior outcomes. In patients who had fStC, rStC and pwStC; 38 (33.0%), 12 (9.1%), 6 (3.4%) developed bile leak (p <.001), 20 (17.4%), 12 (9.1%), 3 (1.7%) developed intraabdominal collections (p <.001), and 28 (24.3%), 10 (7.6%) and 9 (5.1%) required post-operative ERCP (p <.001), respectively. Additionally, for fStC, rStC and pwStC, the median (range) days taken for resolution of bile leak was 14 (1-120), 7 (1-45) and 5 (1-21) days (p <.006) and median duration of admission was 3.0 (1-26), 2.5 (1-25) and 2.0 (0-19) days (p <.001), respectively. No difference in rates of post-op biliary events including cholecystitis and choledocholithiasis were noted across the subgroups (p= .775). Conclusion StC has become the preferred method for "bailout" during difficult laparoscopic cholecystectomy. There are technical variations of StC with different complication profiles. Surgeons should be aware of these nuances, as it may help inform decision making when faced with need to perform StC.

4:36 pm

<u>Management and Outcomes of Early Acute Pancreatitis in Aotearoa New Zealand: A Multicentre,</u> <u>Prospective Cohort Study</u>

<u>Nejo Joseph</u>

Purpose It is currently unknown to what extent recommendations from evidence-based guidelines for the management of acute pancreatitis (AP) have been adopted in Aotearoa New Zealand (AoNZ). This study aimed to determine compliance with evidence-based quality performance indicators (QPIs) for AP

management. Methodology A multicentre, national prospective cohort study of consecutive patients with AP was performed by STRATA, a trainee-led collaborative, June to October 2024. QPIs for each management domain were based on a review of guidelines and expert consensus. Results Overall, 620 patients (age 57 [IQR 37-71] years; 55% female) were recruited from 19 hospitals. The incidence of pancreatic necrosis was 6.1% (n=36); organ failure 7.1% (n=43); and mortality 2.1% (n=13). The most common discrepancies between clinical practice and QPIs included early fluid management (10.3% meeting QPI), severity prediction (22%), and nutrition supplementation (40%). Adherence to QPIs varied significantly between hospitals (p<0.01). Adherence to a greater number of QPIs was significantly associated with reduced mortality (OR 0.55, 95% CI 0.31–0.95, p=0.031). Among individual QPIs, use of prophylactic or treatment-dose enoxaparin, was associated with a significant reduction in 30 day mortality (OR 0.21 CI 0.07–0.68, p=0.009). Conclusion There was significant hospital-level variation in adherence to QPIs; and increased adherence was associated with reduced mortality. A national harmonising protocol may therefore improve outcomes. Further, anticoagulation represents a promising avenue for future therapeutic research in AP.

4:42 pm

Predictor of days alive and at home within 30 days following hepatopancreatobiliary surgery – A multicentre analysis

Fatema Mohammed Ali

Purpose: Hepatopancreatobiliary (HPB) malignancies are among the most commonly diagnosed in Australia. However, major surgeries in this cohort are associated with significant risk and are highly morbid. Days Alive and at Home within 30 Days (DAH30) is a novel composite outcome measure accounting for the index admission, any healthcare readmissions, and deaths within 30 days. This study aimed to identify associations between peri-operative factors and DAH30 in patient undergoing surgery for HPB malignancies. Methodology: This retrospective cohort study included consecutive adult patients undergoing surgery for HPB malignancy at two major hospitals in Sydney, Australia between 2015 and 2022. Logistic linear regression models were used to evaluate the relationship between DAH30 scores and patient characteristics, surgical outcomes and re-admissions to ICU. Results: A total of 981 patients were included. For gastric and hepatobiliary surgeries, the median DAH30 score was 22 days, however for oesophageal and pancreatic procedures, the median DAH30 score were 11 and 15 days, respectively. Overall, increasing age (p<0.001), BMI (p<0.001), surgical time (p<0.001), ASA score (p=0.026), ICU length of stay (p<0.001) and ICU readmission rate (p<0.001) were significant predictors of worse DAH30 scores. Conclusion: This large cohort study established DAH30 benchmarks for HPB cancer surgeries and identified key predictors of poorer outcomes, including increased age, BMI, surgical time, and ICU stays. These findings can guide preoperative optimisation strategies and inform shared decision-making to improve postoperative recovery and patientcentred outcomes in HPB cancer surgery.

4:48 pm

Rising Adoption of Robotic Upper Gastrointestinal and Hepatopancreatobiliary Surgery in Australia 2013– 2023

Edwin Hur-Thompson

Purpose: This study examines trends in the utilisation of robotic surgery for upper gastrointestinal (UGI) and hepatopancreatobiliary (HPB) procedures in Australia from 2013 to 2023. Methodology: A retrospective observational study design was used to analyse the trends in the use of robotic UGI and HPB surgery in Australia. Annual procedure numbers were obtained from Device Technologies, the local distributor of the da Vinci Robotic System. Trends were assessed using Pearson's correlation. Results: A total of 19,663 robotic general surgery procedures were performed from 2013 to 2023, including 3,971 (20.2%) UGI and HPB procedures. Over the study period, use of robotic approaches for UGI and HPB procedures increased (r=0.961, p<0.001). Bariatric procedures, such as sleeve gastrectomy (994 procedures, 26.4%) and gastric bypass (824 procedures, 21.9%), were the most common procedures performed robotically, followed by cholecystectomy (518 procedures 13.0%) and pancreatectomy (365 procedures, 9.2%). From 2021 to 2023, the use of robotic approaches for sleeve gastrectomy (7 procedures, 3.61% decrease) and gastric bypass (42 procedures, 30.4% decrease) decreased, while robotic cholecystectomy (111 procedures, 74.0% increase), hiatal hernia repair (44 procedures, 55.0% increase) and pancreatectomy (41 procedures, 43.2% increase) increased the most. Conclusion: Robotic surgery for UGI and HPB procedures has increased significantly over the past 10 years, reflecting its growing interest among surgeons. Notably, there has been a recent increase in the adoption of robotic approaches for non-bariatric UGI and HPB procedures. These findings can inform the development of practice guidelines and training programs in robotic surgery.

4:00 pm

Translational analysis of Ave-Rec trial: Neoadjuvant chemoradiation plus avelumab in locally advanced rectal cancer

<u>Milton Mui</u>

Introduction: Neoadjuvant chemoradiation (NACRT) is associated with 10-20% pathological complete response (pCR) rate in locally advanced rectal cancer (LARC) patients. Immune checkpoint inhibitors (ICIs) may improve pCR and relapse rates. We aim to characterise changes in the tumour microenvironment (TME) induced by NACRT plus ICI blockade and identify novel biomarkers. Methods: This was a multi-centre, single-arm, phase II trial which included LARC patients (cT3b-4/N1-2/M0) who underwent NACRT plus PD-L1 blockade (avelumab) followed by surgery. Pre- and post-treatment tissue samples were stained with antibodies targeting tumour and immune markers using multiplex immunofluorescence. Pathological response and disease relapse were recorded. Results: Thirty-two patients were included. The pCR rate was 18.8% and major pathological response rate was 34.4%. Three patients had local relapses (9.4%) and five had distant relapses (15.6%). Pre-treatment PD-L1 expression, specifically tumour proportion score (p=0.0043) and combined positive score (p=0.0420), was predictive of pCR. There were significant differences in densities of various immune cells in complete responders compared to non-complete responders. Higher intratumoral T cell density, particularly PD-L1-expressing, was associated with lower relapse risk (p=0.0203). Post-treatment, complete and near complete responders had low immune cell infiltration and no relapse. Some partial responders had high immune cell infiltration without relapse, suggesting that ongoing immune response is critical. Conclusion: We demonstrated significant TME changes in LARC patients after NACRT plus ICI blockade. Several potential immune biomarkers appear promising and require further validation.

4:09 pm

The role of mesenteric resection and Kono-S anastomosis in reducing recurrence after surgery for Crohn's disease: a network meta-analysis

Talia Shepherd

Purpose The role of Kono-S and extent of mesenteric excision in reducing the risk of Crohn's disease recurrence remains unclear in the surgical literature. Clinical trials and meta-analyses have not provided direct comparison of all four approaches. This is a comprehensive network meta-analysis comparing Kono-S and standard anastomosis with limited and extended mesenteric excision. Methodology A comprehensive database search was performed and studies were included if they compared either Kono-S, standard anastomosis, extended mesenteric excision (EME) or limited mesenteric excision (LME) in the setting of Crohn's disease, where disease recurrence was a primary end point. Primary outcomes were endoscopic recurrence (ER) within 18 months and 5 years. Secondary outcomes were surgical recurrence (SR) at 5 years and clinical recurrence (CR) at 1 year. Results Kono-S had significantly lower surgical recurrence at 5 years compared to other anastomosis (OR 0.1; 95% CI 0.04 – 0.25; p < 0.00001) but no difference in ER <18 months was observed (OR 0.84; 95% CI 0.62 – 1.14; p = 0.26) or CR at 12 months (OR 0.81; 95% CI 0.39 – 1.68; p = 0.57). When compared to LME, EME had no difference in ER < 18 months (OR 1.07; 95% CI 0.73 – 1.56; p = 0.72) or SR at 5 years (OR 0.87; 95% CI 0.47 – 1.6; p = 0.65). Conclusion There may be a trend for decreased surgical recurrence of Crohn's disease at 5 years with Kono-S compared to other anastomotic configurations. There is no difference between LME or EME in the published data. Randomised trials on both Kono-S and EME are currently underway, with the results eagerly awaited.

4:18 pm

Developing a preclinical assay to assess CAR-T cytotoxicity against rectal cancer Milton Mui

Introduction: With better appreciation of the tumour microenvironment and success of immune checkpoint inhibitors (ICIs) in locally advanced rectal cancer (LARC), there is growing interest to explore novel immunebased therapies. Chimeric antigen receptor (CAR) T cell therapy is a form of adoptive cell therapy which is highly effective in haematological malignancies but results are disappointing in solid tumours. We aimed to explore its potential in LARC by developing a preclinical assay using a rectal cancer organoid CAR-T cell coculture model. Methods: Rectal cancer biopsies were obtained from two patients at Peter MacCallum Cancer Centre, from which organoid cultures were established. Lewis Y (LeY), a difucosylated carbohydrate antigen which is overexpressed in colorectal cancer, was selected as the CAR target and confirmed to be positive in these organoids. Co-culture assay was performed over 48 hours. Cytotoxicity of LeY CAR-T cells was measured using a fluorescence-based imaging method. ICIs, in the form of PD-1 inhibitors, were added to assess for synergistic effects. Results: In both patients, our assay detected dose-dependent cytotoxicity of LeY CAR-T cells against its target antigen, with significant reduction in fluorescence signal intensity, and monitored killing response over time. The addition of PD-1 inhibitors did not affect CAR-T cytotoxicity. In addition, we were able to provide mechanistic insight into the CAR-T cell response through RNA sequencing and flow cytometry. Conclusion: Our assay provides a robust and high-throughput method to test and optimise CAR-T cell therapy before in vivo testing in LARC. It can become a useful tool for both basic CAR-T cell therapy research and personalised medicine.

4:27 pm

Natural orifice specimen extraction for diverticular disease: does debulking the specimen increase post operative complications?

<u>Mina Sarofim</u>

PURPOSE: Minimally invasive colectomy is common for diverticular disease. Natural orifice specimen extraction (NOSE) is an innovative adjunct that avoids the morbidity of large abdominal incisions required to extract the often bulky diverticular specimens. The aim of this study is to evaluate the outcome of NOSE in laparoscopic surgery for complications of diverticular disease, and whether intracorporeal debulking increases post operative complications. METHODS: A multi-centre prospective study was conducted from 2012 to 2024. Consecutive patients who underwent emergency and elective NOSE colectomy for diverticular disease were included. Demographics, surgical techniques, post-operative complications and biochemical results were analysed. RESULTS: NOSE colectomy was successful in 99.4% of patients (171/172), with a mean age of 59.9 years. Indications for surgery were phlegmon (35%), recurrent diverticulitis (27%), stricture (21%), fistulae (14%), and haemorrhage (2%). Mean length of stay was 5.7 days (SD 3.8), and anastomotic leak rate 1.8%. Specimen longitudinal splitting increased operative time (254 vs 220 minutes, p<0.01) and length of stay (6.6 vs 5.3 days, p=0.02). Significantly higher inflammatory markers were observed in this group on postoperative days 2-4 without increased complication or anastomotic leak rates. CONCLUSION: NOSE colectomy demonstrates excellent perioperative outcomes in this large series and is an effective approach for diverticular disease. Specimen debulking facilitates successful NOSE procedures, with expected increases in inflammatory markers which are not associated with higher complication rates.

4:36 pm

<u>Rectal cancer Watch and Wait at Charlie's – review of protocol and outcomes</u> <u>Ben Finlay</u>

Purpose: Sir Charles Gairdner Hospital (SCGH) commenced Watch and Wait (W&W) in 2017 for rectal adenocarcinoma using a rigorous surveillance protocol. Our earlier results (2017-2019) have been published. We report updated results and suggest a rationalisation of the protocol. Methodology: A retrospective review of a prospectively maintained database and medical records was performed. All patients from 2017-2023 who were referred for long course chemoradiotherapy (LCCRT) as part of rectal adenocarcinoma treatment with curative intent were included. Results: 142 patients were referred for induction LCCRT for rectal cancer. Consolidation chemotherapy usually followed. Six patients did not complete; 31 had a complete or near complete clinical response and were enrolled in W&W. Six patients declined surgery and were offered W&W. Of the 37 patients in W&W, 5 patients had suspected local regrowth and underwent surgical resection. 2/5 had pCR on histopathology. Regrowth cases were identified within 9 months by flexible sigmoidoscopy and sometimes on imaging (PET or MRI). 95 patients did not have cCR and had surgical resection; of these 20 had pCR. Conclusion: 23% of patients referred for LCCRT at SCGH achieved cCR, and this was sustained in 84%. 16% of W&W patients had suspected local regrowth. Our surveillance protocol detected regrowth early and surgical salvage was always possible. 20% of patients undergoing surgery have pCR despite not having cCR highlights the difficulty in avoiding TME in all patients who have a pCR. We propose a reduction in the length and intensity of our current protocol.

4:45 pm

Lignocaine Infusion in Colorectal Cancer Patient Immune Cells (LICPIC Study): a placebo controlled randomised clinical trial

Geoffrey Collins

PURPOSE: Perioperative lignocaine enhances gastrointestinal recovery following colorectal surgery and may improve cancer outcomes via immune mediation of natural killer (NK) cells. This study aimed to assess the effect of lignocaine on immune function following laparoscopic colectomy. METHODOLOGY: A double blinded randomised placebo controlled clinical trial was conducted on patients undergoing elective laparoscopic resection for colorectal neoplasia. Perioperative intravenous and post-operative abdominal wall block lignocaine infusion were compared to placebo. The primary outcome was post-operative NK cell numbers and function. Secondary outcomes included cortisol, IL-2, IL-6, interferon gamma (IFN-γ), CRP, plasma lignocaine, length of stay (LOS), opiate consumption, return of gut function, surgical complications and mortality. RESULTS: Ninety-five patients were randomised to placebo (47) or lignocaine (48). Increased NK cell cytotoxic function from baseline was seen only in the lignocaine group, while the lignocaine group had higher numbers than placebo throughout the study period (p=0.016). There were supratherapeutic

levels of plasma lignocaine after 24 hours (mean 5.71 mcg/ml). Differences were seen between groups in IL-2 levels at 72 hours (4.56; p=0.046), IL-6 at recovery entry (18.8; p=0.021) and IFN- γ at 1 hour (-6.99; p=0.029). There was no mortality in either group and no difference with respect to LOS (5 v 6 days; p=0.529). CONCLUSION: Perioperative lignocaine increases NK cell numbers, IL-6 and II-2 activity and decreases IFN- γ levels post-operatively. High lignocaine levels were seen with abdominal wall infusion. Analgesic consumption was associated with serum lignocaine levels but not with the intervention.

4:54 pm

<u>Mitigating Overtreatment in Rectal Cancer: Enhancing Accuracy of Post-Neoadjuvant Therapy Response</u> <u>Assessment</u>

<u>Jonathan Hew</u>

Purpose: To identify patients with complete pathological response (ypTONO) after neoadjuvant treatment and total mesorectal excision (TME) for rectal cancer, and evaluate clinical decision-making and surgical outcomes in these cases. Methodology: This single-institution cohort study analyzed patients undergoing neoadjuvant treatment for rectal cancer from January 2016 to December 2024. Data were collected from a prospectively maintained oncology database. Clinical decisions were retrieved from multidisciplinary team discussions. MRI images and pathological specimens for ypT0N0 cases were reviewed. Results: Of 109 patients treated with neoadjuvant therapy, 68 underwent TME resection. Neoadjuvant approaches evolved from long-course chemoradiation followed by routine TME to total neoadjuvant therapy followed by TME resection or watch-and-wait strategy. Twelve patients (18%) were identified with ypTONO pathology. Factors contributing to the decision to resect included persistent tumor signal on MRI (6/12 patients), endoscopic evaluation (3/12 patients), and digital rectal examination (3/12 patients). Patients underwent either abdominoperineal resection or ultra-low anterior resection, with 6/12 patients experiencing Clavien-Dindo grade 3 or 4 complications. Conclusions: Improving accuracy in determining complete pathological response to neoadjuvant therapy is crucial to prevent unnecessary surgery. This study suggests that current clinical investigations may lead to overtreatment in some cases. Incorporating additional definitive methods, such as ultrasound-guided biopsy or transanal minimally invasive surgery (TAMIS) for tissue sampling, may enhance the accuracy of confirming malignancy persistence or recurrence.

5:03 pm

<u>Revision trends of Sacral Neuromodulation for Faecal Incontinence: a 14-year observational study</u> <u>Kay Tai Choy</u>

5:12 pm

Low rates of surgical recurrence following ileocolic resections for Crohn's disease in the biologic era. Results of the PORSCIA multicentre Australian study

Hugh Giddings

PURPOSE Ileocolic resections (ICR) are the most common resections for Crohn's disease (CD). Historical control groups have often been used for comparison when assessing post-operative recurrence (POR), usually with temporal bias. This study aimed to: (i) report contemporary rates of POR requiring repeat surgery (surgical recurrence at anastomosis [SR-ICR], or at any site [SR-any]) and the rates of endoscopic recurrence (ER) in the 'biologic era'; and (ii) determine risk factors for SR-ICR and ER. METHODOLOGY A retrospective multicentre study involving twelve tertiary Australian centres was performed. Cox proportional hazards modelling was used to evaluate clinico-pathological risk factors for SR-ICR and ER (defined as Rutgeerts Grade >/= i2b). RESULTS Overall, 911 patients who underwent an ICR for CD between 2007-2023 were included (mean 39.1yrs [SD 15.3], 52% F). Median follow-up was 63.7 months. Rates of SR-ICR were 4.5% (95%Cl:2.8%-6.1%) and 12.8% (95%Cl:8.8%-16.5%) at 5- and 10-years, respectively. Rates of SR-any were 5.6% (95%CI:3.8%-7.5%) and 15.1% (95%CI:11.0%-19.1%) at 5- and 10-years, respectively. Early (within 18-months) ER occurred in 23.5%. On multivariable analysis, smoking (aHR 3.49 [95%CI:1.93-6.29]) was the only factor significantly associated with SR-ICR. Smoking, positive microscopic margins and granulomas were associated with ER, and prophylactic therapy and younger age at diagnosis (<17 yrs) were protective. CONCLUSION The rate of SR at the ileocolic anastomosis in this large Australian cohort was low, recorded to be one-in-twenty at 5-years. Smoking remains the strongest risk factor for both ER and SR. Histopathological factors influence ER and should be considered in future risk prediction models.

5:21 pm

Predictors of success with sacral nerve stimulation for faecal incontinence – results from a single centre over 15 years

Rakesh Quinn

Background: Sacral nerve stimulation (SNS) is an accepted first-line surgical treatment for faecal incontinence (FI) with variable success. This study aims to analyses the parameters that may predict initial and sustained success with SNS in patients with faecal incontinence. Methods: A retrospective audit was

conducted on 56 patients with FI managed with SNS implantation by a single Australian colorectal surgeon. A successful outcome was defined as a 50% or greater reduction in the number of FI episodes per week at the end of the two-week trial period (temporary stimulation) or at their last follow-up visit (permanent implantation). Patient characteristics, pre-implantation anal manometry, endoanal ultrasound and electrophysiological testing were compared on univariate analysis between success and failure groups. Results: Temporary stimulation was successful in 53.6% of patients. Thirty patients proceeded to permanent SNS with 21 (70%) patients having ongoing success over a median follow-up of 50.2 months. BMI>25 and reduced maximal tolerable volume on pre-implantation anal manometry studies predicted success of temporary SNS (p=0.013 and p=0.02, respectively). Whereas a history of vaginal or bladder prolapse surgery predicted failure of temporary SNS (p=0.012). Conclusion: This study identified baseline BMI >25 and relative hypersensitivity of rectal distension predicted success of temporary SNS. A history of previous surgery for vaginal or bladder prolapse was associated with failure. We failed to identify any clinical or pre-assessment parameter that predicted long-term success with permanent stimulation.

4:00 pm - 5:00 pm THE UNFORESEEN PROBLEMS WITH INFORMED CONSENT

Scientific Session - Medico-Legal - Meeting Room C4.3

4:00 pm <u>Problems with Informed Consent or Misinformed Consent</u> <u>Ronald Sekel</u>

The elective surgery consent forms process briefly mention the complications of infection, vascular and nerve injuries. The surgeon understands the possible ramifications of these few words, which includes not just temporary impairments, but also the life changing, financial and family destroying devastating complications that can occur. Does the patient have this full understanding? Frequently not. Would the operation still have gone ahead if it was? Possibly not.

4:10 pm (Un)informed Consent James David

4:25 pm Informed Consent under NSW Health Joseph Lizzio

4:35 pm <u>Review of APHRA'S role in Medicolegal IME reporting</u> <u>Lydia Kamaras</u>

4:45 pm Discussion

4:00 pm - 5:00 pm The Grantley Gill Breast Surgery Research Paper Prize Session

Scientific Session - Breast Surgery - Meeting Room C4.9 - Meeting Room C4.10

4:00 pm

Patient Perceptions of Breast Cancer Surgery Related Lymphoedema Nicola Davis

Purpose Breast cancer related lymphoedema (BCRL) can occur following surgical treatment of breast cancer. Advancement of surgical technique has decreased the risk of BCRL. It remains a feared complication and many patients adopt risk reducing strategies (RRS) to decrease risk, most are not evidence based. The aim of this study was to assess patient perceptions of the risk of BCRL, identify perceived risk factors and determine how frequently these were avoided. Methodology New Zealand patients who had surgical management of breast cancer were invited to complete an online survey distributed by several breast cancer charities. Data included demographics, surgery type, adjuvant

treatment, patient estimated risk of BCRL development. Patients indicated if they thought certain activities increased BCRL risk and if they avoided any of these. Results 683 valid responses were received. 40.7% reported a diagnosis of BCRL. Those who had sentinel node biopsy (SNB), 77% overestimated their risk of BCRL. Those who had axillary node dissection (AND), 72% overestimated their risk of BCRL. 85.9% of those without BCRL adopted one or more RRS, with an average of 4.1 RRS adopted. 84.0% of those who had SNB without a diagnosis of BCRL adopted at least one RRS, with an average of 3.8 adopted. 99.1% of those who had AND without a diagnosis of BCRL adopted at least one RRS, with an average of 5.7 adopted. Conclusion Most patients overestimated their risk of developing BCRL and adopted risk reducing behaviours to mitigate this perceived risk. All bar one of the RRS surveyed are not supported by evidence and unduly restrict use of the arm potentially impacting on survivorship.

4:10 pm

<u>Mastectomy skin flap necrosis after implant-based breast reconstruction: Intraoperative predictors and indocyanine green angiography</u>

Chu Luan Nguyen

Purpose: Nipple-sparing mastectomy (NSM) carries significant risk of mastectomy skin flap necrosis (MSFN) which can compromise oncological, surgical, and quality-of-life outcomes. Prospective data on intraoperative predictors of MSFN could help mitigate this risk. Methodology: Single institution prospective trial of patients undergoing NSM implant-based reconstruction for breast cancer (2021-2024). Flap perfusion evaluated using clinical assessment, and indocyanine green (ICG) angiography perfusion values and angiogram patterns. Ischaemic complications up to 90 days postoperative documented. Patient, operative factors, and perfusion analyses, evaluated with univariate and multivariate analysis. Trial registration: ACTRN12621000828820. Results: One hundred eighty-eight patients underwent 274 NSMs. Eight percent of breasts (22 of 274) developed nipple or skin flap necrosis. Multivariate analysis identified previous radiotherapy, ICG angiography absolute perfusion value <14 units, and absence of a second intercostal perforator vessel as independent factors associated with necrosis (HR2.17, 95%CI 0.92-4.11, p=0.037; HR2.53, 95%CI 1.43-3.6, p=0.014; HR1.2, 95%CI 0.2-1.95, p=0.047; HR2.81, 95%CI 1.13-3.44, p=0.046, respectively). Mastectomy incision type, clinical assessment of flap perfusion, mastectomy weight, and initial tissue expander fill ratio were not found to be independent factors associated with necrosis. Conclusion: Preservation of the second intercostal perforator vessel was identified as a modifiable intraoperative factor that may decrease risk of necrosis after NSM. Poor intraoperative perfusion, as detected by ICG angiography, was associated with a greater likelihood of necrosis.

4:20 pm

<u>A Renewed Hope – Prophylactic Lymphovascular Anastomosis for Breast Axillary Dissection Pilot Study</u> Jake Chia

Purpose Lymphedema is a debilitating disease where the collected lymph fluid exceeds the lymphatic system's ability to transport it, causing protein-rich fluid to leak into the tissues. Left untreated, this stagnant, protein-rich fluid can cause tissue to scar and interfere with wound healing which can result in lymphadenitis, and, in severe cases, skin ulcers, recurrent cellulitis, and death. In Australia, the main cause of lymphedema is due to cancer treatments. Many patients on breast cancer treatment would receive total axillary lymph node dissection (ALND) with about 20-40% developing upper limb lymphedema. Lymphovenous anastomosis (LVA) was described in the 1960s to bypass the accumulated fluid to the venous system. However, once the disease is established, despite LVA, it can still progress with inconsistent long term outcomes. Our study aims to apply the LVA technique concurrently with ALND to prophylactically prevent the incidence of lymphedema. Methodology We performed a prospective pilot study on 20 breast cancer patients undergoing total ALND with concurrent prophylactic LVA. Patient's arms were measured pre- and post-surgery using circumference measurements at 5 different levels. Indocyanine green (ICG) mapping and L-Dex analysis were performed. Patients were followed up at 3, 6, 9 and 12 months. Results No patients have reported any symptoms of developing lymphedema. All patients showed stable circumference measurements, no dermal backflow on ICG, and a normal L-Dex range. Conclusion Our pilot study echoes with other international reports that prophylactic LVA reduces the incidence of lymphedema on patients undergoing ALND. Long term follow ups are required to substantiate this claim.

4:30 pm

Doppler mapping nipple areolar complex blood supply for therapeutic reduction mammoplasty: MAP-NAC a prospective cohort study Peter Barry

4:40 pm

Increased breast cancer incidence and societal factors affecting index presentation at Labasa Hospital, Fiji Enoch Kolinibaravi Purpose: Breast cancer disproportionately affects low- and middle-income countries with increased mortality rates compared to high income countries. For the Pacific island country of Fiji, numerous factors have been hypothesized for the high mortality rate. Delay in initial presentation is thought to be a major contributor. This delay is poorly understood. Methodology: A retrospective, mixed-method study of patients who were diagnosed with breast cancer at Labasa Hospital in Fiji from 2018 – 2022 was conducted. Incidence and mortality rates were obtained from hospital records. Further demographic information and factors pertaining to index hospital presentation were obtained from patient interviews. Results: There were 112 histologically confirmed cases of breast cancer at Labasa hospital with an increase in incidence over the study period from 13 to 24.3/100,000 (p <0.05). Sixty-three patients were able to be interviewed with a mean age of 55.2 years (+/- 13.4). The mean time from symptom onset to initial presentation was 86.9 weeks (+/-152) and time from diagnosis to treatment was 3.4 weeks (+/- 12.4). Six major themes were identified as barriers to index hospital presentation. These were lack of knowledge, fear, health care system delay, preference for alternative treatment, financial difficulties and lack of family support. Conclusion: Breast cancer incidence continues to rise in Fiji with substantial delays from symptom onset to initial presentation. Six major themes were identified as issues for delay in presentation.

4:50 pm

<u>Delays from breast specimen X-ray a thing of the past with novel intraoperative margin assessment utilizing</u> <u>SCOUT probe technology making intraoperative specimen X-ray redundant</u> <u>Yao Huang</u>

Introduction: The most significant predictor for recurrence in breast-conserving surgery (BCS) is margin status with positive margins predictive of a 50% recurrence rate (1). Various methods such as intraoperative USS have been utilized to reduce positive margin rates but often increase operating time and require additional resources. Similar to traditional hookwire localization, SCOUT is another method of localizing impalpable lesions for BCS. It utilizes a radar guidance system which provides feedback on the direction and distance of the reflector from the probe. We propose a novel method of intraoperative margin assessment using SCOUT technology which requires no additional tools or resources. Methodology: A 3-dimensional model of the lesion and therefore margins were constructed based on routine preoperative imaging and SCOUT intraoperative data. A comparison of margin status for wide local excisions (WLE), performed at SAWMH by two breast surgeons, was conducted between traditional hookwire methods and this novel SCOUT technique. Results: Of the first 100 SCOUT WLE performed, utilizing this technique and determined to have a clear margin intraoperatively, 0% required further re-excision. The re-excision rate for hookwire was 11%. Conclusion: This novel method of using SCOUT technology is an efficient, accurate and effective method which requires no additional resources. These findings are especially relevant in regions where intraoperative specimen X-ray is not readily available. 1. Choe AI, Ismail R, Mack J, Walter V, Yang AL, Dodge DG. Review of Variables Associated With Positive Surgical Margins Using Scout Reflector Localizations for Breast Conservation Therapy. Clinical Breast Cancer. 2022;22(2):e232-e8.

03 May 2025

4:45 pm - 5:15 pm ENDOCRINE SURGERY SECTION ANNUAL BUSINESS MEETING

Business Meeting - Endocrine Surgery - Meeting Room C4.11

03 May 2025

5:30 pm - 7:00 pm CONVOCATION CEREMONY AND SYME ORATION (TICKETED EVENT)

Convocation - ***Cross Discipline*** - Darling Harbour Theatre

03 May 2025

7:00 pm - 8:00 pm CEREMONY RECEPTION (TICKETED EVENT)

Official Function - *Cross Discipline* - The Gallery

03 May 2025

8:00 pm - 11:00 pm CONGRESS DINNER (TICKETED EVENT)

Official Function - *Cross Discipline* - Grand Ballroom

04 May 2025

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

Breakfast Session - *Cross Discipline* - Meeting Room C3.6

7:00 am <u>What Clothes Do You Wear?</u> <u>Neil Wetzig</u>

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

Breakfast Session - Indigenous Health - Meeting Room C3.3

7:00 am <u>Te Rau Poka</u> Jonathan Koea

7:00 am - 8:20 am MASTERCLASS (MC01): MEET YOUR JOURNAL - SCIENTIFIC PUBLISHING IN ANZ JOURNAL OF SURGERY (TICKETED EVENT)

Masterclass - <u>*Cross Discipline</u>* - Meeting Room C4.11

7:00 am Introduction Julian Smith, Zsolt Balogh

7:05 am

How to write an abstract from original research Zsolt Balogh

7:15 am <u>Principles of ethical publishing</u> <u>Andrew Hill</u>

The ANZ Journal of Surgery is committed to the transparency and best practice in scholarly publication principles of the Committee on Publication Ethics (COPE). This is one of the things that distinguishes our journal from the growing number of predatory journals. This talk will focus on these principles and their implications for the growth and development of our journal.

7:25 am <u>How to perform a high-quality review for the journal</u> <u>Amanda Chung</u>

7:35 am <u>Artificial intelligence in surgical publishing</u> <u>Julian Smith</u>

7:45 am Discussion

7:00 am - 8:20 am MASTERCLASS (MC03): Pelvic Floor - managing postoperative dysfunction (TICKETED EVENT)

Masterclass - Colorectal Surgery - Meeting Room C4.8

It is a truth universally acknowledged that the restoration of anatomy does not consistently result in physiological improvement. Whilst not unique to pelvic surgery, procedures therein suffer a higher misfortune of unintended functional sequelae. Increasingly, we have come to recognise that our role does not end at anatomical restoration. To optimise a patient's quality of life, we need to understand how to address postoperative dysfunction and identify the underlying factors that drive it.

7:00 am Introduction to session Kim-Chi Phan-Thien

7:10 am <u>Role of SNM in the management of faecal incontinence</u> <u>Steven Wexner</u> When patients continue to experience incontinence following prolapse repair or sphincteroplasty, what are our options? Is SNM our saving grace

7:30 am

<u>Management of obstructed defaecation and laxative-resistant constipation</u> <u>David Lubowski</u> When patients describe incomplete evacuation following resection, whether driven by colonic or anorectal dysfunction, what are our options?

7:50 am <u>Management of Low Anterior Resection Syndrome</u> <u>Kheng-Seong Ng</u> When patients suffer clustering, frequency and urgency following ultra-low resection, what are our options?

8:05 am <u>The role of functional MRI in pelvic floor disorders</u> <u>Jessica Yang</u> Masterclass - Breast Surgery - Meeting Room C4.9 - Meeting Room C4.10

Genetic mainstreaming kit to be provided + case discussions

7:00 am <u>Welcome and Introduction</u> <u>Jocelyn Lippey</u>

7:05 am

Integrating genetic testing at breast cancer diagnosis & the impact of Lynparza on gBRCAm patients Caroline Baker

7:30 am <u>What is genetic mainstreaming?</u> <u>Amy Pearn</u>

7:45 am <u>Panel Discussion & Case Studies</u> <u>Jocelyn Lippey, Joel Symonds, Caroline Baker, Amy Pearn</u>

8:05 am <u>Genetic Mainstreaming Kit</u> <u>Caroline Baker</u>

8:10 am <u>Q&A and Close</u> <u>Jocelyn Lippey</u>

7:00 am - 8:20 am Masterclass (MC04): Maximally Invasive Oesophagogastric Resections (TICKETED EVENT)

Masterclass - Upper GI Surgery - Meeting Room C4.6 - Meeting Room C4.7

7:00 am <u>Maximally invasive oesophago-gastric resections</u> <u>Lorenzo Ferri</u> A comprehensive approach to locally invasive cancers, including en bloc resections of T4B malignancies, will be discussed.

7:30 am <u>Cases</u> <u>Iain Thomson, Michael Devadas, Michael Talbot, Scott Whiting</u>

04 May 2025

8:30 am - 10:00 am PLENARY SESSION - AI IN CLINICAL PRACTICE: A NEW HOPE OR A PHANTOM MENACE?

Plenary Session - *Cross Discipline* - Darling Harbour Theatre

Includes The ANZJS Lecture

8:30 am <u>The ANZJS Lecture: AI in Surgical Publishing</u> <u>Julian Smith</u>

8:50 am

9:05 am <u>Al in Research</u> <u>Steve Wesselingh</u>

9:20 am <u>Panel Discussion: Al in clinical practice: Efficiency, privacy and scale</u> <u>Payal Mukherjee, Teresa Anderson, Julian Smith, Tom Kelly, Georgie Haysom, Matthew Read, Steve</u> <u>Wesselingh</u>

04 May 2025

10:00 am - 10:30 am MORNING TEA - SUNDAY

Catering - *Cross Discipline* - Hall 5

04 May 2025

10:30 am - 12:30 pm Bariatric Innovation

Scientific Session - Bariatric Surgery - Meeting Room C3.3

10:30 am

Life or Death: Bariatric Surgery vs. GLP-1 Agonists in the Battle Against Obesity Chantal Campbell

Purpose: Obesity remains a significant global health issue, contributing to increased mortality due to associated comorbidities such as type 2 diabetes and cardiovascular disease. Both bariatric metabolic surgery (BMS) and glucagon-like peptide-1 receptor agonists (GLP-1RAs) achieve notable weight loss, reducing both morbidity and mortality. However, there is a lack of systematic reviews comparing BMS and GLP-1RAs on all-cause mortality in obese patients. Methodology: A search of PubMed, Embase, and Cochrane CENTRAL databases was conducted through January 2025, following PRISMA guidelines. Studies examining mortality outcomes in patients treated with BMS or GLP-1RAs were included. Data from the selected studies were aggregated, and risk ratios (RRs) with 95% confidence intervals (CIs) were calculated using a random-effects model. Results: This meta-analysis included 10 studies with over 300,000 participants. BMS was associated with a significantly lower risk of all-cause mortality compared to GLP-IRAs (pooled RR: 0.69; 95% CI: 0.60–0.79, p < 0.0001), reflecting a 31% reduction in mortality risk. Additionally, BMS was associated with greater weight loss and higher rates of type 2 diabetes remission compared to GLP-IRAs. Conclusion: Both GLP-IRAs and BMS are linked to reductions in mortality among obese individuals. However, BMS is associated with a more significant decrease in all-cause mortality, offering greater weight loss and metabolic improvements than GLP-1RAs. These findings suggest BMS may be a more effective strategy for managing obesity and reducing cardiovascular risk, highlighting its potential as an essential treatment option for eligible patients.

10:45 am <u>Magnetic Bariatric Surgery</u> <u>Mark Magdy</u>

11:00 am <u>New drugs on the horizon</u> <u>Ramy Bishay</u> The field of obesity pharmacotherapy is advancing at an accelerated pace, with exciting new successively potent drug trials showing promise in treating obesity and its related complications. This succinct session will highlight the latest advancements in 3rd (and 4th) generation anti-obesity treatments and novel lines of query and modes of action that have multiple downstream target effects. A brief mention of the efficacy of these treatments and their related CV data and benefits in other disease states (OSA, OA, MAFLD and neurological disease) will be discussed.

11:20 am <u>ESG</u> <u>George Balalis, George Balalis</u>

11:35 am Day Case Bariatric Surgery - Can we do it? Matthew Honore

11:55 am <u>Sleeve + surgeries</u> <u>Mina Guirgis</u>

12:15 pm Discussion

10:30 am - 12:30 pm HPB ONCOLOGY

Scientific Session - HPB Surgery, Surgical Oncology - Meeting Room C4.4

10:30 am <u>Pancreatic Neuroendocrine Tumours</u> <u>Callisia Clarke</u> Contemporary Surgical Management of Pancreatic Neuroendocrine patients.

11:00 am Discussion

11:10 am <u>Robotic Pancreatic Resections</u> <u>David Yeo</u>

11:30 am Intervention for liver metastases from NETs David Boshell

11:50 am <u>PET imaging and systemic therapies in pNET</u> <u>David Chan</u>

Pancreatic NETs are uncommon malignancies with significant clinical heterogeneity. WHO grade can predict biological behaviour, but this is often hard to measure accurately prior to resection. Dual PET imaging with 68Ga-DOTATATE/I8F-FDG PET holds the promise of a "virtual biopsy", predicting biological course both before resection and in the setting of advanced disease. At the same time, there are a number of emerging therapies for pNET with randomized clinical trials being published in the last few years. This presentation will cover the use of PET imaging to predict biology in pNET and discuss recent trial evidence for systemic therapy in pNETs (including PRRT trials).

12:10 pm Discussion Scientific Session - Hernia Surgery, Rural Surgery, General Surgery - Meeting Room C4.5

10:30 am <u>COPS and General Surgery – Improving Care of Older Persons</u> <u>Christina Norris</u>

10:55 am <u>Outpatient Monitoring in the Community/Virtual Care</u> <u>Sze-Yuan Ooi, Sze-Yuan Ooi</u>

11:20 am Outpatient Management of Uncomplicated Diverticulitis Kheng-Seong Ng

11:45 am <u>Prehabilitation in Major Abdominal Surgery</u> <u>Anthony Shakeshaft</u>

12:10 pm Discussion

10:30 am - 11:00 am KEYNOTE LECTURE - ASSOCIATE PROFESSOR CHRISTOPHER HARMSTON (Whangarei, Aotearoa New Zealand)

Keynote Lecture - Rural Surgery - Meeting Room C4.2

10:30 am <u>Building surgical research capacity in provincial and rural hospitals</u> <u>Chris Harmston</u>

10:50 am Discussion

10:30 am - 11:00 am KEYNOTE LECTURE - ASSOCIATE PROFESSOR JAMES FRENCH (SYDNEY, AUSTRALIA)

Keynote Lecture - Breast Surgery - Meeting Room C4.9 - Meeting Room C4.10

10:30 am Evolution of Mesh with Implant based Breast Reconstruction – What is the future? James French

10:50 am Discussion

10:30 am - 11:00 am KEYNOTE LECTURE - DR STEPHEN SMITH (NEWCASTLE, AUSTRALIA)

Keynote Lecture - Colorectal Surgery - Meeting Room C4.8

10:30 am <u>From ERAS to EIRAS</u> <u>Stephen Smith</u> A talk on the concepts of ERAS and future directions for colorectal surgical resections Keynote Lecture - Upper GI Surgery - Meeting Room C4.7 - Meeting Room C4.6

10:30 am <u>Are PPIs really that bad?</u> <u>Emad El-Omar</u>

10:55 am Discussion

10:30 am - 12:30 pm Research Papers

Scientific Session - Indigenous Health - Meeting Room C4.3

10:30 am

Wound care education in remote Northern Australia Richard Barnett

Following a needs analysis in 2017, the Australasian Foundation for Plastic Surgery (AFPS) received a Commonwealth grant to conduct wound care workshops across remote northern Australia. Since 2018, working in close consultation with remote clinics and Aboriginal Community Controlled Health Organisations (ACCHOs), AFPS has run approximately 50 place based, face to face workshops for remote health care workers. From Tiwi Islands to Groote Eyeland, from Darwin to Nhulunbuy and across to the Torres Strait over 800 participants have attended. The workshops consist of lectures on wound assessment and both acute and complex wound care and are complemented by purpose made videos. There is then a hands-on component using pigs' trotters as the model to teach basic suturing and other skills. The workshops are all conducted by Specialist Plastic Surgeons on a pro-bono basis. The workshops are backed up by a purpose built on-line educational portal developed by AFPS. This reinforces the lessons given, provides continuing access to all educational videos, as well as providing interactional self assessment lectures. Our own impact assessment analysis, as well as external assessments, demonstrate the value of our work. The goals are to improve remote heath outcomes by increasing community self sufficiency, improve remote health worker education, allow more patients to be treated in their communities and to save money by minimising unnecessary transfers to regional centres.

10:40 am

<u>Assessing the Generalisability of the Drumbeat.Al Artificial Intelligence Model: A Pilot Study in a Novel</u> <u>Population of New Zealand Ears</u>

Justin Eltenn

Introduction: Drumbeat.AI is a deep learning classification algorithm for analyzing otoscopic images, primarily trained on images from Australian Indigenous children. Given higher risk of middle ear disease among Māori and Pasifika populations in New Zealand (NZ), this study assesses the algorithm's generalizability in a novel population of NZ ears. Methods: Otoscopic images, tympanometry, and audiometry data from urban NZ children (3-12yo) were collected at an audiology clinic. 3 otolaryngologists labeled images into four categories: Normal, Acute Otitis Media (AOM), Middle Ear Effusion (MEE), and perforation. Images lacking consensus or showing tympanic membrane retraction were discarded. Remaining images were split into training (100) and testing (50) datasets. AI was retrained using the training set, and diagnostic performance evaluated for accuracy, sensitivity, specificity Results: From 200 datasets, 150 were retained after exclusions. Overall accuracy reached 82%. After retraining with 100 NZ images, binary classification accuracy (normal vs. abnormal) improved to 84%, and disease-specific accuracy (normalvs.MEEvs.perforation) reached 82%. Initial testing had 11 misclassifications (7 MEE), reduced to 9 after retraining (5 MEE). Misclassifications of normal ears as MEE were more common in NZ children of European descent.Conclusions: AI demonstrated improved diagnostic performance after retraining with local NZ images. While overall accuracy increased, specific classes showed variable improvement: MEE classifications and perforations improved significantly, whereas misclassifications for normal ears remained a concern. Future research with larger NZ-based training datasets would enhance the model's performance and address the observed misclassifications.

10:50 am

Literature review: Cultural Competency in Aboriginal and Torres Strait Islander Burn Injuries Caroline Lam

Purpose Research focused on culturally safe management of aboriginal and Torres Strait islander (ATSI) burn injuries is limited. This review summarises literature on the management of burn injuries in Indigenous populations in a culturally safe and competent manner. Methods: A search was conducted in CINAHL, Ovid MEDLINE and Pubmed for "cultural competency OR cultural safety" and "burn OR scars OR scald" and "Aboriginal OR Indigenous OR First Nation OR OR Torres Strait Islander." Inclusion criteria included studies of burns in Indigenous Australian persons published in English. Studies were excluded if there was no data specific to Indigenous burns. Results: Five studies were included for review. They were published between 2015 and 2021. Results include qualitative cross-sectional studies, reviews and a protocol for a prospective cohort study. Barriers identified to providing culturally safe care were families perceiving disrespectful care, feelings of isolation and difficulties in access to follow-up and rehabilitation. There is also under-utilisation of aboriginal liaison officers (ALO). Conclusion There is a gap in literature regarding culturally safe and competent practices required to meet the needs of ATSI burn patients which contributes to the disparities in health outcomes. Health policy and management is predominantly influenced by Western biomedical paradigms. Healthcare services lack the relevant resources to adequately address the gap in cultural safety when providing care for these patients. One solution is the early utilisation of ALO in burn care teams to address this.

11:00 am

Enhancing recruitment of First Nations peoples in cancer surgical trials: A ground up approach Cherry Koh

Purpose: To address underrepresentation of First Nations peoples in cancer surgical trials through developing, implementing, and evaluating a community-led intervention to improve recruitment and retention of First Nations participants. Methodology: Five streams will be pursued to address the aim: 1) Community engagement and baseline evaluations (engaging First Nations community leaders, conducting a comprehensive scoping review and analysing current trial participation rates); 2) examination of Community experience (facilitating culturally safe yarning circles with First Nations patients, families and carers and conducting stakeholder interviews to identifying systemic barriers to trial participation); 3) codesigning recruitment enhancement strategy (through Community-led workshops, ensuring cultural appropriateness guided by First Nations patients and communities); 4) implementation of co-designed strategy (integrating developed intervention into current cancer surgical trials, with continuous evaluation and health economic analysis); and 5) assessment of scalability (disseminating results through Communityapproved channels, embedding practices within state and national services). Results: The results of this body of work will be toward: increasing First Nations participation in cancer surgical trials; developing and supporting a culturally appropriate recruitment model; implementing a scalable intervention framework; undertaking economic evaluation of the co-designed strategy; and enhancing health equity in clinical research. Conclusion: This Community-centered approach seeks to develop, implement and evaluate a culturally safe strategy to enhance the recruitment of First Nations participants in cancer surgical trials.

11:10 am

Summarising the Evidence Regarding Access to Publicly Funded Bariatric Surgery in Aotearoa, New Zealand – A Systematic Review Noah Appleby

Purpose Despite the high burden of obesity-related disease among Māori and Pacific peoples, access to publicly funded bariatric surgery in Aotearoa remains inequitable. This systematic review examines barriers, facilitators, and disparities in access to bariatric surgery, identifying key themes and policy implications. Methodology A Kaupapa Māori-aligned systematic review was conducted, searching PubMed, Scopus, Embase, Medline, CINAHL, and Cochrane for studies published from 2000 onward. Exclusions included case reports, non-New Zealand studies, conference abstracts, and editorials. Study quality was assessed using MMAT, adapted CONSIDER framework, and MAORI framework. Results 334 studies underwent screening, with 101 full texts assessed. A total of 26 studies met the inclusion criteria. Ethnic and geographic disparities in bariatric surgery access were evident. Māori and Pacific patients faced barriers, including restrictive preoperative requirements, inconsistent referral pathways, and geographic inequities. Referral acceptance rates were lower despite comparable clinical needs. Facilitators included whanau and community support, a strong personal desire for improved quality of life, and culturally responsive care models, which enhanced engagement with bariatric services. Conclusion Persistent disparities in bariatric surgery access reinforce systemic inequities in Aotearoa's healthcare system. Policy changes, including prioritisation criteria adjustments and culturally tailored interventions, are needed to improve equitable access. Greater integration of Kaupapa Māori principles and equitable resource distribution is essential for addressing disparities and improving long-term health outcomes for Māori and Pacific peoples.

11:20 am

Bladder cancer in Aboriginal and Torres Strait Islanders, a scoping review. Trent Pattenden

Introduction & Objectives: Bladder cancer (BC) is the 3rd most common urological malignancy in Australia, where Aboriginal and Torres Strait Islander (ATSI) people have more modifiable risk factors, earlier diagnosis and worse survival rates. This scoping review is the first to comprehensively map knowledge on this topic. Methods: A systematic search of MEDLINE, EMBASE, CINAHL, Web of Science, and grey literature sources was conducted. Abstracts and full-texts were reviewed, and references of all included sources were screened for additional sources. Two reviewers performed screening and data extraction. Results: Out of 1045 sources screened, 208 underwent full-text review, and 23 met inclusion criteria. Most sources were peer-reviewed journal articles (65%), while 87% reported cancer registry data. Only one source focused on patient outcomes from a single institution. Muscle invasive BC was the primary focus, with I source discussing non-muscle invasive disease. Treatments specifics were explored in only 2 sources. Most sources did not consider the social determinants of health (SDH) for ATSI Australian's. When discussed, these included cultural beliefs (n=4), health education (n=1), geographic barriers (n=4), risk behaviors (n=3), and social cohesion (n=1), usually in the context of all cancers rather than BC specifically. Conclusions: The literature on bladder cancer in ATSI Australian's is limited, particularly regarding non-invasive BC, treatment efficacy, and the impact of the SDH. Future studies should focus on individual institution experiences, the prevalence of superficial BC, and the lived experience of ATSI Australian's to better understand how to reduce risk factors and improve survival.

11:30 am

<u>Haumanu hauora, whakaiti te puku – a systematic review of bariatric surgery outcomes in Aotearoa New</u> <u>Zealand</u>

<u>Elaijah Tuivaiti</u>

Purpose Although Maori and Pacific populations are overrepresented in obesity-related diseases, there is a lack of research exploring the inequities present within bariatric surgery outcomes. This systematic review examines weight loss and bariatric surgery outcomes - identifying any preventable disparities and key themes. Methodology A Kaupapa Māori-aligned systematic review was undertaken, searching PubMed, Scopus, Embase, Medline CINAHL, and Cochrane for studies published since 2000 and onward. Papers excluded were case reports, non-New Zealand studies, conference abstracts, and editorials. Papers were screened and assessed using MMAT, adapted CONSIDER framework, and MAORI framework. Results 334 papers were screened, with 101 full texts assessed. A total of 74 studies met the inclusion criteria. The most common study designs were retrospective cohort studies (19%). Bariatric surgery was consistently associated with improved health outcomes and significant diabetes remission rates. However, Māori population representation was reported in just under 50% of studies, with inclusion rates ranging from 14% to 31%. Very few of the studies address culturally responsive methodologies, participation, or dissemination practices, performing low within the CONSIDER and MAORI frameworks. These findings highlight both the clinical benefits of bariatric surgery and the need for greater equity in research and surgical practices. Conclusion This study highlights the limited research undertaken to reveal the systemic disproportionate disparities within bariatric surgery outcomes in Aotearoa New Zealand. This review emphasises the need for guality research to confront these inequities, in hopes of implementing systemic and policy change.

11:40 am

A ten year retrospective review of hand trauma in the NT comparing presentation in Indigenous vs nonindigenous population

<u>debanjan ghosh</u>

The Northern Territory poses unique challenges with its remote geography and vulnerable demographics. Method: Retrospective review of all hand injures from Jan 2007- Dec 2017 is collected Classified into Indigenous vs non-Indigenous, types of injuries are noted and timing of presentation from initial injury to seeking treatment is noted Results: Delayed presentation is double that of non-Indigenous group, complicated by high abscondment, lack of treatment completion and later presentation with complication Conclusion: Disproportionately high rate of Indigenous involvement with reduced completion of treatment is noted. Fight bites common in Indigenous population while nailbed and fracture dislocations underepresented as type of injuries. This is unique challenge to the Northern Territory sociodemographic and neccessitates more education, awareness and resources in bridging the gap and cultural barriers

11:50 am Discussion Scientific Session - Endocrine Surgery - Meeting Room C4.11

10:30 am

Beyond Genomics: AI-Driven Preoperative Histological Subtype Classification of Indeterminate Thyroid Nodules.

<u>Karishma Jassal</u>

Purpose Accurate preoperative risk stratification of indeterminate thyroid nodules (ITNs) is critical to avoid over or undertreatment. This study developed a Multiclass Classification Model (MCM) using a multimodal artificial intelligence (AI) approach to classify ITNs into papillary thyroid carcinoma (PTC), follicular lesions or benign colloid lesions. Methods The MCM integrated dual-scale ultrasound (USG) imaging inputs - capturing both nodule-specific (localised) and broader USG anatomical (global) features - alongside FNAC results and demographic data, creating a comprehensive diagnostic framework. The MCM was trained on 6000 images, incorporating both institutional and open-source datasets, ensuring heterogeneity in imaging sources. A deep convolutional neural network architecture was used for construction of the MCM. Results The MCM achieved an overall accuracy of 92%, with a sensitivity of 92%, specificity of 96% and an AUC of 0.92. Notably, it distinguished PTC with 95% accuracy and follicular lesions with 93% accuracy. An explainability system was constructed that allowed surgeons to visualise key regions within the USG image influencing the MCM's diagnosis. Key regions are highlighted in red, with less significant areas shown in cooler tones, resembling the colour gradients used in PET scans. Additionally, confidence intervals are generated by repeated stochastic passes generating multiple predictions for a single USG image which allows for risk assessment. Conclusion This multimodal, dual-scale AI system demonstrates the potential to enhance histological classification of ITNs, guiding personalised therapeutic decisions. Its utility is especially significant in settings where access to genomic testing is limited.

10:42 am

Tumour-infiltrating Lymphocytes (TILs) assessed using the International TILs Working Group System (ITWG) are not prognostic in Medullary Thyroid Cancer

Lydia Zhou

Background Tumour-infiltrating lymphocytes (TILs) are a protective prognostic factor in several solid tumours and predict response to immune checkpoint inhibitor therapy. The prognostic impact of TILs in Medullary Thyroid Cancer (MTC) is poorly understood. Methods Using the International TILs Working Group System (ITWG) we assessed the TILs profile of primary MTC tumours and correlated this with clinicopathological prognostic variables, including the International Medullary Thyroid Cancer Grading System (IMTCGS) grade and survival outcomes. Results Using the ITWG system, all patients with MTC had low TILs, with a median (range) of 3% (0-10%). This group was further subdivided into 'very low' 0-4% and 'low' 5-10%, and on cox regression analysis, increasing TILs were associated with increased local recurrence (log rank p=0.022), reduced disease-specific survival (log rank p=0.015) and a trend to decreased distant metastasis-free survival (log rank p=0.14). When examining the association between TILs and other prognostic factors, only high IMTCGS grade was associated with increased TILs. On multivariable logistic regression analysis, there was no significant association between TILs and local recurrence or diseasespecific survival. Conclusions Our study demonstrated that TILs are not prognostic in MTC. Even high-grade MTC can be considered an immune quiescent tumour, and the adverse prognostic factors associated with higher grade tumours outweigh the marginal increase in immune recognition associated with a slight increase in TILs. The low level of TILs in MTC and their lack of correlation with survival suggest that immune checkpoint inhibitor therapy may not be effective.

10:54 am

Same Day Thyroidectomy: Evidence Based Guidelines and a Review of Patient Eligibility Jacqueline Hawthorne

Purpose Post-operative care following thyroidectomy usually includes at least an overnight hospital stay due to risks of hypocalcaemia and haemorrhage. Internationally, many centres are moving to same day thyroidectomy. NSW Health recommends a target of 15% for same day thyroidectomy, yet in 2024, only 2% achieved this goal. The purpose of this study was to review the evidence base, propose guidelines for same day thyroidectomy appropriate to Australian health care settings, and then determine the percentage of patients who might be suitable. Methodology International guidelines were reviewed and synthesised. Local guidelines appropriate to our health context were proposed. A retrospective audit of all thyroidectomies from John Hunter Hospital during 2023 was performed. Results Local guidelines included patient eligibility criteria, discharge criteria and a pathway for representation to hospital. Guidelines were deliberately conservative, with the intent to consider broadened criteria if initial implementation was successful. Patients considered eligible for day case thyroidectomy included: aged <75, good social support (responsible adult to stay with patient overnight) and geographical proximity (<30 minutes drive) to the hospital). Exclusion criteria included bilateral thyroid surgery, major medical or psychological comorbidity, anticoagulation or antiplatelet use, or previous neck surgery. Of the 157 thyroidectomies performed in 2023, 19 patients (12%) met eligibility criteria. Conclusion Same day thyroidectomy may be appropriate in well selected patients but requires system change focussed on patient safety. The target of 15% same day thyroidectomy set by NSW Health seems aspirational in our patient cohort in the short term.

11:06 am

Intraoperative Parathyroid Hormone – Establishing a Protocol and twelve months of Experience in an Australian Hospital

Edwina Moore

Purpose: The role of rapid intraoperative parathyroid hormone (ioPTH) testing is to improve the rate of curative parathyroid surgery, limit unnecessary dissection and reduce operative time. It is internationally accepted as a useful adjunct during parathyroidectomy, but is not widely utilised in Australia. Methods: This study describes the process of establishing a clinical protocol for ioPTH testing in a single private hospital. Surgeons, theatre staff and scientists worked together to devise a mutually acceptable standard operating procedure and regularly reviewed performance over twelve months. Our aim was to create a practical ioPTH reporting algorithm, thirty minutes from taking the venous sample to calling the surgeon with a result. Results: Forty-two patients underwent parathyroid surgery, by two surgeons, at a single institution (Nov 2023-Oct 2024). The majority (95.2%) had primary hyperparathyroidism. ioPTH was utilised in all cases. The mean time taken to obtain the pre-excision ioPTH sample was 33.2 minutes and the 10 minute post excision ioPTH sample was 32.4 minutes. Eight patients had more than two samples drawn during surgery, when inadequate parathyroid hormone decay prompted the suspicion of multigland disease or non-curative excision. The average % decay between the PRE- and POST-10 samples was 67.6% (- ie > 50%). The overall surgical cure rate was 95.2% (42/43 patients). Conclusion: The use of ioPTH in Australian hospitals is feasible and highly effective in reducing the incidence of non-curative surgery. However, it requires a motivated team to initiate and maintain the dedicated programme. Routine use should be considered by all Australian endocrine surgeons.

11:18 am

Addressing Non-Genetic Resistance to Tyrosine Kinase Inhibitors in Medullary Thyroid Cancer Sara Terer

Purpose: Medullary Thyroid Cancer (MTC) is a rare malignancy with limited treatment options in advanced stages. Tyrosine kinase inhibitors (TKIs) such as Cabozantinib (Cabo) and Selpercatinib (Loxo) have improved survival rates, yet resistance—especially non-genetic resistance—remains a major challenge. This study aimed to develop and characterise non-genetic TKI-resistant MTC cell models, identify resistance mechanisms, and explore the therapeutic potential of integrin inhibitors in overcoming resistance. Methodology: Resistant TT cell lines were developed by treating TKI-sensitive cells with escalating doses of Cabo or Loxo over eight months. TKI resistance was confirmed using cell-based assays, and whole-genome sequencing ruled out resistance-causing mutations. Transcriptomic profiling identified activated pathways through mRNA sequencing followed by Ingenuity Pathway Analysis. The ability of the integrin inhibitor Cilengitide to restore TKI sensitivity was evaluated in cell-based assays. Phosphoproteomics will further assess the molecular effects of integrin inhibition. Results: TKI-resistant cell lines exhibited significantly reduced sensitivity to TKIs without acquiring mutations linked to resistance. Transcriptomic analysis identified integrin signalling among the most activated pathways. Combination treatments with Cilengitide restored TKI sensitivity, reducing proliferation and migration in resistant cells. Conclusion: Preliminary findings suggest that integrin signalling is implicated as a driver of non-genetic TKI resistance in MTC. Targeting integrins with inhibitors such as Cilengitide shows promise in restoring TKI efficacy, offering a potential strategy to overcome resistance.

11:30 am

Quality of life after hemi and total thyroidectomy for thyroid cancer

Natasha Newman

Purpose Thyroidectomy is the main treatment for thyroid cancer, a disease with rapidly increasing incidence in Australia. This study compared quality of life (QOL) outcomes after hemithyroidectomy (HT) and total thyroidectomy (TT), information that could assist surgical decision making and optimise outcomes for thyroid cancer patients and survivors. Methodology A prospective cohort study was conducted, including adults diagnosed with thyroid cancer who had undergone a HT or TT within the Australian and New Zealand Thyroid Cancer Registry. Patients who underwent subsequent completion HT were excluded. Quality of life outcomes were measured at 3, 6 and 12 months postoperatively using the internationally

validated EORTC C30 and THY34 instruments, examining domains of cognitive, emotional, physical, social and role functioning. Linear mixed-effects models were used to assess the changes in QOL outcomes over time between HT and TT. Results The sample for analysis included 498 patients with thyroid cancer, 187 who had undergone HT and 311 TT. The majority of participants were females (77.0%) and the mean age was 53 years. Papillary carcinoma was the predominant histology (85.0%). Social and role functioning were significantly better in the HT group (p=0.043) in the early postoperative period. By 12 months, there was no difference between groups in all domains. Conclusion Though HT patients reported better scores in role functioning in the early postoperative period, both HT and TT patients had good functional quality of life by 12 months post-surgery. These findings are useful for preoperative counselling and setting expectations.

11:42 am

<u>18F-Fluorocholine PET is Superior to Conventional Imaging for Parathyroid Localisation in Primary</u> <u>Hyperparathyroidism</u>

Wendy Liu

Purpose 18F-fluorocholine PET (FCH PET) is a novel imaging modality for localising parathyroid adenoma(s) in primary hyperparathyroidism (pHPT). European guidelines recommend FCH PET after failure to localise on conventional imaging (US, 4DCT, Tc99m sestamibi). There are no Australian surgical series that have previously evaluated this imaging modality. This study aims to determine the accuracy of FCH PET in parathyroid localisation after negative conventional imaging. Method A prospective study of patients with non-localised pHPT who underwent FCH PET using F-18 Choline 228.3MBq was performed. Baseline characteristics, clinical data and previous imaging results were collected. Accuracy was determined by the correlation of FCH PET, intra-operative location of abnormal parathyroid gland(s) and histopathology. Biochemical cure was assessed with post-operative serum corrected calcium and parathyroid hormone (PTH). Results 17 patients were included (13 women; mean age 60+/-11.1 (SD), pre-operative corrected Ca 2.7+/-0.1mmol/L and PTH 13.2+/-45pmol/L. All had prior negative or equivocal imaging, and 12 patients had persistent or recurrent disease. 12 scans (70.6%) were positive (10 single adenomas, 1 multiple adenomas, 1 metastatic parathyroid cancer) with mean SUV max 7.3+/-3.5. In 5 scans, no lesion was identified. 7 patients localised on FCH PET underwent parathyroidectomy (4 pending) with 9 adenomas (7 ectopic) confirmed on histopathology. 100% were biochemically cured with post-operative corrected Ca 2.3+/-0.1mmol/L and PTH 4.2+/-2pmol/L. Conclusion In this first Australian surgical series FCH PET demonstrates superior sensitivity to US, 4DCT and sestamibi for parathyroid localisation. FCH PET appears to be an effective imaging modality for complex pHPT patients.

11:54 am

Intraoperative Parathyroid Hormone Monitoring as a Viable Alternative to Frozen Section: Insights from the First Australasian Comparative Study

Marli Williams

Purpose: Frozen section (FS) is an established standard for decision-making during parathyroidectomy for primaryhyperparathyroidism (PHPT). While intraoperative parathyroid hormone monitoring (ioPTH) is used internationally, its adoption in Australasia is limited due to specialized equipment and assays. This study reports the first Australasian deployment of ioPTH using a standard parathyroid hormone (PTH) assay integrated into a hospital biochemistry service. Aim is to assess the efficacy and feasibility of ioPTH, vs FS, outline challenges in it's implementation. Methods: A case-control study was conducted at Eastern Health on patients with PHPT (May 2022–Dec 2023), excluding redo parathyroid surgeries and suspected parathyroid carcinoma. Patients were divided into two groups: FS only and ioPTH+FS. Surgical success in the ioPTH+FS group was defined using the Miami criteria (>50% decline in PTH from pre-excision to 10 minutes post-excision). Outcomes assessed included surgical efficacy, result turnaround time, and correlation between FS and ioPTH findings. Results: 15 and 21 patients were recruited in FS and ioPTH+FS group respectively. The ioPTH+FS group had a higher proportion of minimally invasive parathyroidectomy (85% vs. 60%). Surgical cure rates were 85% in the ioPTH+FS group versus 65% in the FS group (p = 0.3). The mean time to results was 28 minutes for ioPTH+FS and 23 minutes for FS (p < 0.1). No complications were attributed to the ioPTH process. Conclusion: Our study highlights the feasibility and benefits of ioPTH using standard assays in Australasian hospital settings. The protocol enhances the success rate of parathyroidectomy and offers a practical alternative to FS, addressing barriers to adopting ioPTH in the current setting.

12:06 pm

The prognostic significance of lymphovascular invasion in TI papillary thyroid cancer Alexandra Jacobson

Purpose Vascular invasion is considered a poor prognostic feature in papillary thyroid cancer (PTC), and a relative indication for radioactive iodine treatment (RAI). Intratumoral lymphatic and vascular invasion are difficult to distinguish pathologically, and are often grouped together as "lymphovascular invasion" (LVI).

However, the significance of LVI as an independent risk factor in otherwise low-risk PTC is unclear. We sought to clarify the prognostic impact of LVI in TI PTC. Methodology A retrospective cohort study of 1111 patients treated surgically for TI PTC between 2016 and 2023 at a tertiary referral centre was performed, using prospectively collected data. Results 204 (18.4%) patients with TI PTC had LVI and 19 (1.7%) patients developed disease recurrence. RAI therapy was used in 315 (28.4%) patients. Pathological factors determining the use of RAI included LVI, tumour size, aggressive histologic variant, margin involvement, multifocality and lymph node involvement. In 11 (3.5%) patients LVI was the single determinate of the use of RAI. LVI was associated with structural recurrence on univariate analysis (OR 2.65, 95% CI 1.03-6.82, p=0.043). On multivariable analysis, independent predictors of recurrence were lymph node involvement (OR 14.4, 95% CI 3.09-67.06, p<0.001) and involvement of >5 lymph nodes (OR 2.95, 95% CI 1.10-7.91, p=0.032). Conclusion The presence of LVI is not independently prognostic for disease recurrence in TI PTC and, in the absence of other high-risk features, may not be an indication for RAI.

10:30 am - 11:00 am THE JOHN MITCHELL CROUCH FELLOWSHIP LECTURE

Named Lecture - <u>*Cross Discipline*</u> - Meeting Room C3.4 - Meeting Room C3.5

10:30 am <u>Targeting intraosseous nerves to treat painful osteoarthritis</u> <u>Eugene Ek</u>

10:30 am - 11:00 am The Hamilton Russell Memorial Lecture - Dr Ajit Sachdeva (Chicago, USA)

Keynote Lecture - Surgical Education - Meeting Room C2.2 - Meeting Room C2.3

10:30 am Introduction

10:35 am

Preparation of Medical Students for Surgery Residency Training: Key Considerations; Major Advances Ajit Sachdeva

This lecture will provide background information relating to the preparation of medical students for surgery residency training and describe relevant conceptual frameworks that need to form the basis of educational programs and interventions to help medical students prepare for this transition. A number of national curricula and programs that have been developed in the US will then be mentioned and the highly individualized interventions of mentoring and coaching outlined. Strategies to specifically address the transition between medical school and surgery residency training will be addressed next and effective communication among educators across this transition will be emphasized. Finally, key programs of the American College of Surgeons Division of Education that are aimed at preparing medical students for surgery residency training will be highlighted. The topics and content addressed during this lecture may be readily applied at institutions across the globe.

04 May 2025

11:00 am - 12:30 pm Advancements in Breast Surgery and Cancer Detection

Scientific Session - Breast Surgery - Meeting Room C4.10 - Meeting Room C4.9

11:00 am Rationalising oncoplastic breast conservation: evidence and solutions beyond "levels" and "extremes" Andreas Karakatsanis

11:25 am

Robot-assisted vs. Open Nipple-sparing Mastectomy With Immediate Breast Reconstruction Hyung Seok Park

11:50 am

BCAL Diagnostics – Verification in Australian Patients David Speakman

12:05 pm

Breast cancer stroma as next novel biomarker of invasive disease Ngoc Hoang Ha

PURPOSE: Tumour-promoting stromal modifications is an early event in breast cancer. They have been linked to the development of the invasive breast disease and thus have been proposed as therapeutic and diagnostic targets but with minimal translational success. This project aims at evaluating "cystine rich with EGF like domains 2" (CRELD2) – a tumour cells' secreted protein that mediates breast cancer-tumourstroma crosstalk, as the first in class biomarker of the early invasive breast cancer. METHODOLOGY: This is a prospective, correlational study. 58 patients who fit the inclusion criteria were recruited from the Royal Adelaide Hospital Breast Outpatient Department. Pre-operative, intra-operative, post-operative blood samples and intra-operative tumour core biopsy tissues were collected for analysis. Highly sensitive CRELD2 ELISA assay was developed, and tumour core biopsy homogenates and blood serum were tested to determine CRELD2 levels. This data was analysed against the patient's tumour and disease phenotype, particularly poor prognostic markers. RESULTS: There were 38 tumour core biopsies obtained. Of these, detectable systemic CRELD2 was found in 20 patients (52%) and tumour lysates were CRELD2-positive in 22 patients (57.9%). Presence or absence of CRELD2 in patients' plasma was linked with its levels in tumour tissue (76.8%). Intra-tumoral concentration of CRELD2 strongly correlated with the tumour grade. Most importantly, patients with tumours producing high levels of CRELD2 were found at significant risk of having axillary lymph node metastasis. CONCLUSION: Our findings show the utility of CRELD2 as a novel biomarker of early invasion in breast cancer.

12:15 pm Discussion

11:00 am - 12:30 pm Benign UGI debates

Scientific Session - Upper GI Surgery - Meeting Room C4.7 - Meeting Room C4.6

11:00 am <u>DEBATE - Manometry prior to antireflux surgery - Everyone needs it!</u> <u>David Liu, Anna Isaacs</u>

11:40 am <u>DEBATE - Hiatus hernia repairs - Everyone needs a fundoplication!</u> <u>Michael Talbot, David Martin</u>

11:00 am - 12:30 pm Complex Benign Surgery in the Abdomen

Scientific Session - Colorectal Surgery - Meeting Room C4.8

11:00 am Recognising Surgically Complex Diverticulitis Andrew Gilmore

11:20 am <u>Hartmann's procedure in 2025</u> <u>David Clark</u> This presentation will discuss the contemporary role of Hartmann's procedure in today's practice. The evidence supporting the procedure will be presented and framed by the robust trials comparing it to primary anastomosis in the setting of perforated diverticulitis. Some tips for minimally invasive platforms will be discussed. There are many pitfalls that are uncovered with experience and these will be illustrated. Patients have articulated views regarding diverting stomas and their preferences will be presented.1, 2 [1]Mackay I, Clark DA, Nicholson J, Edmundson A, Steffens D, Solomon M. Risk taking propensity: Nurse, surgeon and patient preferences for diverting ileostomy. Colorectal Dis. 2022; 24:1073-9. [2]Clark DA, Stevenson A, Lumley J, et al. Does an ileostomy cover the surgeon or the anastomosis? ANZ J Surg. 2022; 92:19-20.

11:40 am Endometriosis involving the colorectum Stephen Pillinger, Yogesh Nikam

12:00 pm <u>Complex Abdominal Crohn's Surgery</u> <u>Eugene Ong</u>

12:20 pm Discussion

11:00 am - 12:30 pm RURAL SURGERY - THRIVING IN THE MIDST OF CHALLENGES

Scientific Session - Rural Surgery, Younger Fellows - Meeting Room C4.2

11:00 am Northern Exposure - 10 years in the Top End Richard Bradbury

11:18 am <u>Rural surgical workforce - How to recruit and retain a quality team</u> <u>Allen-John Collins</u>

11:36 am

Reducing surgical waitlists: Where do we even start?

K-lynn Smith

The COVID-19 pandemic significantly increased surgical waitlists as some Australian states and territories restricted semi-urgent (Clinical Priority Categories 2) and non-urgent (Clinical Priority Categories 3) procedures. 2023-24 data from the Australian Institute of Health and Welfare (AIHW) suggests that public hospital admissions for elective surgery have now returned to 2019-2020 levels. However, patients are waiting longer than they did before the pandemic. There is also high variability in wait times across Australia. Through a rapid evidence check, we identified three priority areas in which improvements are most likely to yield significant outcomes for the Australian healthcare system in reducing surgical wait times: 1) Streamlining processes and patient journeys to address the surgical waitlist backlog; 2) Improving waitlist management and prioritisation strategies; and 3) Reducing low-value, high-cost care. Reducing surgical wait times will require concerted actions by policy makers, surgeons, and patients. The literature suggests that there are implementable options, which provide us with somewhere to start in addressing this complex issue.

11:54 am

From Innovation to Excellence in a regional setting

<u>Philip Gan</u>

Surgeons and doctors are problem solvers and innovators, however taking a concept through the arduous journey of patents, prototyping, pre-clinical and clinical trials, regulatory approvals and international sales is nonetheless a road less travelled. This presentation will tell the story of Dr Phil Gan's experiences, and how this shaped the rest of his minimally invasive surgical practise in a regional centre.

Russell Hodgson

Climate change is projected to become the leading cause of adverse health outcomes globally, and the healthcare system is a key contributor. Surgical theatres are three to six times more pollutant that other hospital areas, and produce anywhere from a fifth to a third of total hospital waste. Rural centres have recently witnessed the impact of climate change with an increased frequency of drought and floods and are thus well motivated to improve the environmental sustainability of services. However, guidelines and scientific literature on how to make rural surgery more environmentally sustainable are lacking. This talk aims to address some of the key areas that rural centres can look at adopting, such as on site waste disposal, reducing transport environmental costs, and reducing low value care.

11:00 am - 12:30 pm SPECIALTY TRAINING SELECTION - CAN WE DO IT BETTER?

Scientific Session - Trainees Association, Surgical Education - Meeting Room C2.3 - Meeting Room C2.2

11:00 am

<u>The concept of efficiency in speciality training selection - It's about time</u> <u>Jerome Laurence</u>

11:10 am

The history of surgical selection in Australia David Storey

Over the 73 years from inception of the College to 2000, selection into surgery in Australia moved from admission by a Board of Censors, through a post WWII exit examination to a structured program training program (Advanced Surgical Training – AST) from 1970. Basic Surgical Training was only fully embraced by the College with accredited hospitals and educational material in 2000. In 2000 the RACS was required by the Australian Competition and Consumer Commission to apply for authorisation for its monopoly position for selection, examination and certification of surgeons in Australia, based on public benefit. The application succeeded but the ACCC imposed stringent processes, including strict criteria for accreditation for both BST hospitals and AST posts plus adoption of the Brennan framework in selection processes, leading to a binational selection process with mixed benefits. In 2004/5 the Council moved towards a new program intended to replace both BST and AST - the Surgical Education and Training (SET) program – implemented in 2008. Once the surgical science examination was moved back to being a prerequisite for SET, in reality SET was AST by another name. Unfortunately these changes allowed Fellows to consider that their responsibilities began and ended with the SET trainees on their department; these changes have led to a vicious cycle leading to longer and longer training without clear benefit for trainees or patients. Is it time for a review of selection and programs before surgery loses its appeal?

11:20 am

Impact of inefficiency - Trainees' perspective

<u>Isaac Ealing</u>

The goal of training programs is to efficiently train competent surgeons to meet the needs of the community. Historically, this was achieved with 4-6 years of specialty training after internship, with the option of additional fellowships in sub-specialties. Over time surgical training has lengthened, with both pre-SET and fellowship duration increasing. Prevocational junior doctors now make up 21% of the junior medical workforce, and on average general surgical training commences PGY 6.3, at 31-years-old. Anecdotally, for other surgical specialties this is even longer. At the same time, fellowships are becoming routine and often multiple years prior to obtaining a consultant position. Despite the prolonged duration there is no evidence to suggest that this has improved training., yet the implications may be understated for trainees, surgeons and patients.

11:30 am

Impact of Selection Criteria - A Medical Student's Perspective

<u>Suvarna Soni</u>

Selection into speciality training is the complex process of reconciling limitless human desires with finite training resources and future career opportunities. These difficulties may be ascribed to "competition". The processes and procedures (the criteria) of selection themselves may exacerbate or alleviate the competition. The efficiency of selection, as defined by the time from graduation to selection in accredited speciality training, is not widely recognised as an attribute of the selection systems. Consequently, the impact of the criteria on efficiency is not weighed against other goals, such as equity, diversity or rural workforce

shortages. From a predominantly undergraduate system in the late 1990's, there has been a drastic increase in the proportion of postgraduate entry into medical education in Australia. While maturity may have benefits in terms of clinical performance and patient rapport, this has resulted in a rise in the median age of graduate doctors entering the medical workforce. Furthermore, the length of time required to train specialists is increasing. This presentation will explore the role that the selection criteria in all specialities play in the efficiency of sorting medical students in their career pathways. We show that, in addition to the inevitable competition, the lack of coordination of the criteria of selection greatly exacerbates the inefficiency of the selection process. Due to the increasing age of medical graduates and increasing length of training, inefficiency impacts the choices made by medical students.

11:40 am Discussion

11:00 am - 12:30 pm Vascular Trauma

Scientific Session - Vascular Surgery, Trauma Surgery - Meeting Room C4.1

11:00 am <u>TBE in Acute Aortic Injury</u> <u>Steven Maximus</u>

11:15 am <u>Trauma and Bleeding Management, An Endovascular First Approach</u> <u>Vikram Puttaswamy</u>

11:30 am <u>Anaesthetic insights into trauma management in a war zone - Lessons learned in Palestine</u> <u>Jeremy Hickey</u>

11:45 am <u>Vascular Abdominal Injuries in Gaza, dealing with haemostasis with minimal resources.</u> <u>Bushra Othman</u>

12:00 pm Discussion

04 May 2025

11:30 am - 12:30 pm ANZ CHAPTER OF THE ACS "SCIENTIFIC FORUM" SESSION

Scientific Session - <u>*Cross Discipline*</u> - Meeting Room C3.6

11:30 am

Indocyanine Green versus Technetium-99m for Sentinel Lymph Node Biopsy in Breast Cancer: The FLUORO Trial Chu Luan Nguyen

11:38 am

<u>The Adelaide Score: prospective implementation of an artificial intelligence system to improve hospital and cost efficiency</u> Joshua Kovoor

11:46 am

Long-Term Ex-Situ Normothermic Machine Perfusion of Rodent Livers: An Innovative Model to Perfuse

<u>Grafts Beyond 72 Hours</u> <u>Mark Ly</u>

11:54 am

Association between gastric rhythm and reflux disease defined by simultaneous Gastric Alimetry and pH testing William Xu

12:02 pm

Beyond Genomics: Al-Driven Preoperative Histological Subtype Classification of Indeterminate Thyroid Nodules Karishma Jassal

12:10 pm The economic and environmental footprint of PrecisionPoint prostate biopsies Kylie Lim

12:18 pm Final judging and annoucement

04 May 2025

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

Business Meeting - *Cross Discipline* - Meeting Room C3.6

12:30 pm <u>Chapter President's Report</u> <u>Christopher Pyke</u>

12:40 pm International Update Beth Sutton

12:30 pm - 1:30 pm LUNCH - SUNDAY

Catering - <u>*Cross Discipline*</u> - Hall 5

04 May 2025

12:45 pm - 1:15 pm Solventum Lunch Session: 30 years of innovation in NPWT – Abdominal Wall Reconstruction and Hernia Repair

Scientific Session - <u>*Cross Discipline*</u> - Meeting Room C4.10 - Meeting Room C4.9

12:45 pm 30 years of innovation in NPWT – Abdominal Wall Reconstruction and Hernia Repair Kellee Slater

04 May 2025

1:30 pm - 2:00 pm KEYNOTE LECTURE - DR MICHAEL HOLLAND MP (BEGA, AUSTRALIA)

Keynote Lecture - Indigenous Health - Meeting Room C4.3

1:30 pm <u>A NSW Perspective on Indigenous Health - Political, Clinical and Personal</u> <u>Michael Holland MP</u>

1:30 pm - 2:00 pm KEYNOTE LECTURE - DR NICOLE ILONZO (New York, USA)

Keynote Lecture - Vascular Surgery - Meeting Room C4.1

1:30 pm Pulmonary embolism management by vascular surgeons Nicole Ilonzo

1:30 pm - 2:00 pm KEYNOTE LECTURE - DR STEVEN WEXNER (Weston, USA)

Keynote Lecture - Colorectal Surgery - Meeting Room C4.8

1:30 pm <u>The Surgical Management of Fecal Incontinence</u> <u>Steven Wexner</u>

1:30 pm - 2:00 pm KEYNOTE LECTURE - PROFESSOR ELISABETH ELDER (SYDNEY, AUSTRALIA)

Keynote Lecture - Breast Surgery - Meeting Room C4.9 - Meeting Room C4.10

BreastSurgANZ Invited Speaker

1:30 pm <u>Al in medicine - what's left?</u> Elisabeth Elder

Artificial intelligence (AI) is poised to transform cancer care by enhancing diagnostics, predicting treatment responses, and personalizing therapies. AI systems can rapidly process vast datasets, identify patterns invisible to humans, and optimize clinical decision-making. As AI takes over routine, data-heavy tasks, the role of human doctors will shift toward complex judgment, empathy, and shared decision-making with patients. Experienced clinicians must adapt by embracing AI as a tool, focusing on tasks requiring human insight, and engaging in continuous learning. Building resilience involves developing digital literacy, cultivating adaptive mindsets, and fostering collaborative, team-based care models. Question: was this written by a Bot?

Keynote Lecture - Surgical Education - Meeting Room C2.2 - Meeting Room C2.3

1:30 pm

Creating a culture for leadership to survive Kevin Lowe

In this session we will explore the conditions under which leadership for proactive change is enabled and thriving, as compared to a culture where managerialism dominates to preserve the status quo. Edgar Schein (2010) defined organizational culture as: a pattern of shared basic assumptions that the group learned as it solved its problems of the external adaptation and internal integration, that has worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." Geert Hofstede defined culture as "the collective programming of the mind that distinguishes the members of one group or category of people from others" (Kirkman, Lowe & Gibson, 2017). A first observation from these definitions is culture is learned and is thus identifiable and malleable. A second observation is the inherent and embedded tension that arises from culture being anchored in the successes of past practices which are simultaneously in need of evolution to ensure future survival. A third observation is that many organizations, especially complex systems like healthcare, are comprised of multiple and strong subcultures where members may hold strongly to differing collective programming of the mind and professional identities. In this session techniques will be identified to manage the meta-story that can create a culture for leadership to survive rather than perish. References Kirkman, B. L., Lowe, K. B., & Gibson, C. B. (2017). A retrospective on Culture's Consequences: The 35-year journey. Journal of International Business Studies, 48, 12-29. Schein, E. H. (2010). Organizational culture and leadership (Vol. 2). John Wiley & Sons.

1:55 pm **Discussion**

1:30 pm - 2:00 pm **KEYNOTE LECTURE - PROFESSOR MARK SMITHERS (BRISBANE, AUSTRALIA)**

Keynote Lecture - Upper GI Surgery - Meeting Room C4.7 - Meeting Room C4.6

1:30 pm

The neck in three stage oesophagectomy - tips & tricks **Mark Smithers**

On occasions, for reconstruction after oesophagectomy, an anastomosis in the neck will be required. Our unit has a series of more than 900 cases where, following oesophagectomy, a neck anastomosis was required. From 1993 to 2017, there were 680 patients with a gastric pullup and neck anastomosis. Anastomotic leak occurred in 73 patients (10.7%): grade 1, 9.8%; grade 2, 0.7%; grade 3, 0.1% (required surgical intervention). The vocal cord palsy rate (transient) was 2%. The presentation will include a video outlining the steps for the approach to the oesophagus in the neck, transfer of the conduit to the neck, and completion of an anastomosis. Tips related to each step will be presented along with an overview of the changes that have occurred over time.

1:55 pm Discussion

1:30 pm - 3:30 pm Operative cholangiogaphy, cholangioscopy or ICG fluorescence: different tools for the same job?

Scientific Session - HPB Surgery - Meeting Room C4.4

1:30 pm Spyglass cholangioscopy **Omar Mouline**

2:00 pm Indocianine green (ICG) cholangiography Andrew Gray

2:30 pm

Operative cholangiogram: Value added and role of CBD exploration Russell Hodgson

3:00 pm Intra-operative cholangiogram Mohammed Ballal

1:30 pm - 3:30 pm RESEARCH PAPERS

Scientific Session - Trainees Association, General Surgery, Hernia Surgery - Meeting Room C4.5

1:30 pm

<u>General surgery mortality identifies regional and remote clinical outcome inequity</u> <u>Ryan Atkins</u>

Purpose: To compare in-hospital deaths of Australian metropolitan and non-metropolitan surgical patients and identify patient, hospital, and peri-operative factors that contribute to differences in healthcare outcomes. Methodology: Cross-sectional study of retrospective data collected by the Australian and New Zealand Audits of Surgical Mortality from 2017-2020. Factors measured included comorbidities, preoperative death risk, peri-operative management and decision-making. Multiple logistic regression analyses adjusted for age, sex, and Aboriginality. Results: This study included a total of 4845 general surgical patients across Australia; 3483 (71.9%) from metropolitan hospitals and 1362 (28.1%) from non-metropolitan hospitals. After adjusting for potentially confounding variables, non-metropolitan patients were more likely to be of Aboriginal or Torres Strait Islander descent (odds ratio 7.89, 95% confidence interval 5.53–11.46), have cardiovascular disease (1.22, 1.06–1.40), diabetes (1.20, 1.02–1.41), to experience a delay to surgical diagnosis (1.71, 1.37–2.13) or experience an adverse event (1.29, 1.10–1.50). Delayed non-Metro patients were more likely to have post-operative complications than delayed Metro patients (1.73, 1.09–2.75). Conclusion: The increased incidence of delayed surgical diagnoses in non-Metro patients and their subsequent higher rate of postoperative complications, are identified as key areas where patient care could be improved in non-Metro settings. Delays to surgical diagnosis in non-Metro patients were associated with primary care. This study highlights deficiencies in socioeconomic opportunity, health literacy, and healthcare access outside of metropolitan centres.

1:40 pm

The diagnostic accuracy of the Clinical Abdominal Scoring System (CASS) in predicting Blunt Traumatic Intra-Abdominal Injuries (IAI) taking Computed Tomography as a Gold Standard: A Single-Centre Study Wafa Iftekhar

Background: In developing countries with limited healthcare resources, excessive ancillary investigations can waste resources and delay patient care. Deciding which patients need these tests after blunt trauma is critical. The Clinical Abdominal Scoring System (CASS) is reported to predict intra-abdominal injuries from blunt abdominal trauma effectively. Objective: Evaluate the diagnostic accuracy of the clinical abdominal scoring system (CASS) against CT results to predict IAI in blunt abdominal injury victims trauma Design/Setting: A prospective observational study over 11 months was conducted in the General Surgery Department at Agha Khan University Hospital, a level 1 trauma centre in Karachi, Pakistan Participants: All hemodynamically stable adult patients, 18 to 80 years of age with blunt abdominal trauma who presented to the Emergency Department from 1st November 2020 to 2nd October 2021 and underwent complete history and examination by the trauma team members and computed tomography of the abdomen with intravenous contrast were consecutively enrolled. CASS scores were calculated. Results: Of 110 patients, the CT scan of the abdomen showed positive findings in 33 (30%) patients. The CASS scores ranged from 4 to 14 with the maximum number of patients (40) scoring 8 – 9. There were 60 (54.5%) patients with low risk and 50 (45.4%) with high-risk CASS scores. The CASS sensitivity was 84.8%, specificity 71.42%, positive predicted value 56%, negative predicted value 91.67%, and overall diagnostic accuracy was 75.4%. The ROC curve showed AUC as 0.865 (95% 0.78-0.94). Conclusion: High diagnostic accuracy and reliability were observed for CASS to predict intra-abdominal injuries in blunt abdominal trauma patients taking CT results as a gold standard.

1:50 pm

The Adelaide Score: prospective implementation of an artificial intelligence system to improve hospital and cost efficiency Joshua Kovoor

Background The Adelaide Score is an artificial intelligence system that integrates objective vital signs and laboratory tests to predict likelihood of hospital discharge. Methods A prospective implementation trial was conducted at the Lyell McEwin Hospital in South Australia. The Adelaide Score was added to existing human, artificial intelligence, and other technological infrastructure for the first 28 days of April 2024 (intervention), and outcomes were compared using parametric, non-parametric and health economic analyses, to those in the first 28 days of April 2023 (control). Artificial intelligence evaluated inpatients admitted under 18 surgical and medical teams, and patients of high likelihood of discharge were provided, on working shifts between Thursday to Sunday, to the Supportive Weekend Interprofessional Flow Team (SWIFT) comprising a senior nurse and pharmacist. Results 2968 admissions were included across intervention and control periods. Relative to the control group, use of the Adelaide Score in the intervention group resulted in significantly shorter median length of stay (3.1 vs 2.9 days, p=0.028) and significantly lower seven-day readmission rate (7.1 vs 5.0%, p=0.02). The 0.2 bed-day reduction in median length of stay produced a cost saving of \$735,708.60 across the 28-day period, or \$9,564,211.80 across a 52-week year. There was no significant difference between intervention and control groups in median length of stay for patients discharged on weekends, in-hospital mortality, or discharge to non-home destinations. Conclusions The prospective implementation of the Adelaide Score was associated with improved hospital and cost efficiency, alongside lower readmissions, for patients across surgical and medical services.

2:00 pm

Broad Skills, Narrow Resources: The Role of General Surgeons in Rural Healthcare Delivery Nariyoshi Miyata

Rural general surgeons play a critical role in managing diverse and complex surgical cases, often necessitated by the limited availability of surgical subspecialties in remote healthcare settings. Mount Isa Hospital (MIH) is a rural hospital in far North Queensland that serves as the main public referral centre within the North-West Hospital and Health Service. It has department of general surgery, however, there are no further surgical subspecialty services on-site, nor an on-site intensivist. The nearest subspecialty services are at Townsville University Hospital, 900 km away. This study analyses inter-hospital transfer data from MIH general surgical department over 12 months in 2024 to highlight the breadth of surgical skills and knowledge required for general surgeons in rural practice. Of the 1,902 total surgical admissions; 268 patients required transfer to tertiary centres, with 110 orthopaedic patients and 29 general surgical patients accounting for the majority of cases, followed by neurosurgery, maxillofacial surgery, and urology. Transfers depended on case acuity and retrieval availability, requiring general surgeons to manage cases locally. Some conditions typically handled by subspecialists were managed conservatively by general surgeons with guidance from subspecialists when required. The findings highlight the need for rural general surgeons to maintain broad competencies across specialties to stabilise patients until transfer or provide definitive care. General surgical training should include remote hospital rotations to expose trainees to diverse pathologies. Investments in local orthopaedic, intensive care, and anaesthetic services would enhance the capacity to manage complex cases locally, reducing transfers and improving outcomes in remote regions.

2:10 pm

Ethical concerns surrounding "See and Treat" clinics Justin Hunt

2:20 pm

Robotic surgery credentialing across institutions: are we covering it? Frank Dunley

Robotic surgery is a quickly growing resource in surgery, with institutions required to create or update policies surrounding credentialing operating surgeons. Credentialing requirements have previously been shown to widely vary across institutions in a 2021 North American study (1) despite a large widely available 2008 consensus document on robotic surgery (2). We sourced robotic surgery credentialing policies from institutions with a robotic program in Victoria, Australia with a high response rate. Extraction of requirements, themes, and credentialing pathways was undertaken. There were common themes including basic qualification requirements, previous robotic experience, previous caseload, new robotic surgeon, and proctoring requirements. Despite common themes there was significant variability across institutions, including a lack of definition of basic requirements, significant variability in require caseloads, and poor definition of surgeon proctors. Finding this variability suggests that despite previous consensus documents robotic surgery is still a rapidly growing area that policy is unable to keep up with. Further research could further evaluate this effect across the country. Stakeholders could be involved in ensuring a homogenous policy across institutions ensuring best patient care while promoting the teaching and learning of robotic surgery moving forward. 1/ Huffman EM, Rosen SA, Levy JS, Martino MA, Stefanidis D. Are current credentialing requirements for robotic surgery adequate to ensure surgeon proficiency?. Surgical

Endoscopy. 2021 May;35:2104-9. 2/ Herron DM, Marohn MJ, SAGES-MIRA Robotic Surgery Consensus Group. A consensus document on robotic surgery. Surgical endoscopy. 2008 Feb;22:313-25.

2:30 pm

NSQIP audit: General Surgery readmissions in the over 65s. An Australian unit preliminary audit. Claire Russell

The National Surgical Quality Improvement Project (NSQIP) is a global initiative to audit and improve surgical services. NSQIP auditors found our unit has higher-than-expected unplanned readmission rates, and existing data suggests over 65s are more likely to be readmitted than younger populations. Our project aimed to identify risk factors and reasons for over 65s representing to hospital after surgery and to develop a quality improvement project to reduce representations and readmissions. This retrospective audit collected data on over 65s undergoing general surgical procedures in 2023 who had an unplanned representation to ED or readmission to hospital within 30 days of their index operation. There were 62 representations and 32 readmissions from a total of 1159 cases. 5.34% of general surgery cases in over 65s resulted in a representation within 30 days, and 2.76% of cases resulted in unplanned readmission within 30 days. NSQIP data for the first three months of 2024 showed the readmission rate for general surgery across all ages was 6.61%. Median time to representation was 10 days, and median readmission duration was 3 days. Surgical site infections (SSIs) represented 1 in 6 representations, with most requiring readmission, and severity ranging from mild cellulitis to necrotising fasciitis. The over 65s had a lower-than-expected rate of readmission compared with all ages. Simple wound issues and SSIs represented a large burden of both readmissions and representations, some of which could be preventable. Most representations happened before the first scheduled follow-up, indicating a need for improved access to the surgical team.

2:40 pm

Beyond the Cutting Edge: Exploring the Role of VR and AR in Shaping the Future of Surgery Lara Letunica

Virtual Reality (VR) and Augmented Reality (AR) technologies have made significant strides in the field of surgery, particularly in surgical education, perioperative planning, and the simulation of surgical outcomes. VR and AR involves the use of interactive 2D and 3D imaging technology to assist in the visualisation of complex anatomy, providing surgeons with a greater understanding of patient-specific features before, during and after procedures. Studies have demonstrated that VR and AR aid in reducing errors, assist in refining and gaining surgical skills, and offers live guidance to result in more individualised and sophisticated interventions. However, challenges remain in terms of the cost-benefit ratio with many questioning whether the financial investment in these technologies is worthy and relative to the long-term impact on patient outcome and surgical efficiency. This literature review critically assesses current research to evaluate the advantages, limitations, and feasibility of implementing VR, AR and mixed reality in plastic surgery in order to offer insight into how these technological advancements will shape the future of surgical practice – taking into consideration its application in surgical training and perioperative planning to allow for superior surgical outcomes and greater patient satisfaction, particularly in the field of plastic and reconstructive surgery.

2:50 pm

<u>Comparing Tools for Predicting 30-Day Mortality Risk in Emergency Laparotomy: A Retrospective Cohort</u> <u>Study</u>

Shauna O'Brien

Introduction Emergency laparotomy is associated with significant morbidity and mortality. Accurate preoperative risk prediction is essential to guide clinical decision-making, allocate resources, and optimize patient counseling. We aimed to compare three commonly used risk calculators—the National Emergency Laparotomy Audit (NELA) tool, the American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP) calculator, and the New Zealand Surgical Risk Tool (NZSORT)—in predicting 30-day mortality following emergency laparotomy in a New Zealand cohort. Results A total of 312 emergency laparotomy procedures were performed on 291 patients. The 30-day mortality rate was 7.7% (24/312). NELA achieved the highest discrimination (AUC = 0.9057) and demonstrated good calibration (0.375). The ACS-NSQIP calculator showed similar discrimination (AUC = 0.8812) but moderate calibration (0.247). NZSORT had fair discrimination (AUC = 0.7467) and poor calibration (0.062). Conclusion In this cohort, NELA provided the most accurate estimates of 30-day mortality risk, closely followed by ACS-NSQIP. NZSORT performed less reliably in terms of both calibration and discrimination. These findings highlight the importance of validating and refining risk prediction tools for diverse clinical settings to improve perioperative planning and patient outcomes.

Scientific Session - Bariatric Surgery - Meeting Room C3.3

1:30 pm

How does reflux impact procedure selection/pre-operative Ix? Mohammed Ballal

1:50 pm <u>Management of reflux after sleeve</u> <u>Gratian Punch</u>

2:10 pm

Management of Reflux after mini-bypass

Craig Taylor

Reflux after One Anastomosis Gastric Bypass (OAGB) may be Acid, Non-Acid, or mixed. This presentation defines the incidence of reflux after OAGB, and describes the investigative approach, including the roles of upper endoscopy, impedance pH, biliary scintigraphy and reflux isotope studies. It then outlines the key treatment modalities, including hiatal repair, fundoplication using the remnant stomach, Braun anastomosis, and conversion to Roux-Y, as well as their effectiveness.

2:30 pm

Management of reflux after roux-en-y bypass Gregory Falk

2:50 pm

Effectiveness of hiatus hernia repair for the treatment of GORD symptoms after sleeve gastrectomy: a multicentre study

Ashleigh Sercombe

Purpose: Persistent, worse, or new symptoms of gastroesophageal reflux disease (GORD) are common after sleeve gastrectomy (SG) and can be associated with the presence of a hiatus hernia (HH). We aimed to assess the effectiveness of HH repair (HHR) for the management of medically refractory GORD symptoms after SG. Methods: We conducted a retrospective case series on patients from two centres who underwent HHR as an independent operation after SG. The primary outcome was GORD symptom severity measured using a structured symptom questionnaire (SSQ, total range 0-7). Secondary outcomes included changes in weight and obesity-related health problems and the need for further GORD treatment. Results: Fifty patients were included; mean age was 51 years, 80% were female and mean follow-up was 83.4 months. Patients demonstrated a significant reduction in body mass index (BMI) post-SG (mean reduction: 11.4 kg/m2, sd 5.81, p<0.0001). After SG, patients reported moderate-to-severe heartburn (84%, n=42), regurgitation (64%, n=32), and nocturnal reflux (48%, n=24). Following HHR, these symptoms significantly improved, with 90% (n=45) reporting mild or no heartburn, 84% (n=42%) experiencing mild or no regurgitation, and 88% (n=44) free of nocturnal reflux (p<0.0001 for all). There were no significant differences in reported outcomes for heartburn (p=0.28) or total reflux score (p=0.82) following hiatus hernia repair compared to pre-LSG scores. Six patients (12%) required conversion to Roux-en-Y gastric bypass (RYGB) due to recurrent GORD symptoms. Conclusion: HH repair presents a promising solution to adequately control GORD symptoms after SG. Severe reflux persists in a minority of patients who are unable to avoid conversion to RYGB.

3:10 pm Discussion

1:30 pm - 3:00 pm Research Papers

Scientific Session - Trauma Surgery - Meeting Room C4.2

Presentations marked with an asterisk (*) are eligible to be considered for the Damian McMahon Paper Prize.

Breaking bones and the rules: An Audit of Paediatric E-scooter Trauma in Regional Australia Matthew Clanfield

Background: The use of electric scooters (e-scooters) has steadily increased in recent years, with a parallel rise in popularity among paediatric users. This study aims to determine the incidence of e-scooter accidents, injury severity, and radiation exposure associated with e-scooter use among paediatric patients on the Sunshine Coast, Australia. Methods: A retrospective cohort study was conducted using hospital and registry data from January 2023 to December 2023 for presentations under the age of 16 years. Data collected included demographic details, accident mechanisms, Paediatric Trauma Severity Scores (PTSS), imaging studies performed, and self-reported speed at the time of the incident. Results: During the study period, 82 presentations with e-scooter-related trauma. The majority were male (77%), with ages ranging from 6 to 15 years and a median age of 14 years. Notably, 53 patients were aged 14 or 15, accounting for 10.9% of all ED presentations in this age group during 2023. The median Paediatric Trauma Score was 11, indicating a minor injury; however, 13 presentations (15%) were classified as either life-threatening or potentially lifethreatening. Radiology was required in 84% of presentations, with 18% of cases involving CT imaging. The primary mechanism of injury was a fall from the e-scooter (79%). Conclusion: Paediatric e-scooter trauma, as observed in presentations to the Sunshine Coast University Hospital, is associated with a substantial number of injuries, predominantly among young males, and results in significant radiation exposure from diagnostic imaging. These findings highlight an urgent need for greater awareness of e-scooter regulations within the paediatric population.

1:39 pm

<u>Fillet-of-Sole Free Flap: A Lifeline in Traumatic AKA Reconstruction</u> <u>Brandon He</u>

Purpose: The fillet-of-sole (FOS) flap, consists of the glabrous skin of the foot sole, plantar muscles, and fascia. Leveraging the "spare-parts" principle, it is particularly valuable when local tissues are inadequate for conventional reconstruction. Its durability and sensory capacity make it ideal for prosthetic use, especially in young, active trauma patients without peripheral vascular disease. Despite this, it remains underutilised and predominantly described in a pedicled form for BKA reconstruction. To our knowledge, this is the first case report detailing the use of a non-pedicled FOS free flap for an AKA in the aftermath of trauma. Case Report: A 20-year-old male sustained a high-energy above knee impalement injury to the distal posterior thigh in a motorbike accident resulting in a complete transection of the distal right superficial femoral artery and sciatic nerve. Revascularization was attempted however the degree of eventual muscle necrosis necessitated an amputation. There was insufficient viable posterior tissue to allow for a conventional AKA. As such, reconstruction using a FOS free flap with posterior tibial artery and vein anastomoses and neurorrhaphy of the tibial to sciatic nerve was performed. Total ischaemic time was 103 minutes. At 12 months, the flap remained healthy and sensate with no wound breakdown or phantom pain. 10g monofilament testing was intact over 60% of the flap surface. Conclusion: The FOS free flap offers a durable, sensate solution for complex AKA reconstruction where local tissue is insufficient. This case demonstrates its successful use in trauma, preserving limb length and enabling functional recovery, underscoring its potential in challenging reconstructive scenarios.

1:48 pm

<u>*Risk Factors for Poor Outcomes in Older Adults with Rib Fractures</u> <u>Maria Brand</u>

Background: Rib fractures are a common injury. Early identification of patients at high risk of poor outcomes offers an opportunity for early aggressive management and to improve outcomes. Many studies analyse risk factors and the development of clinical prediction tools, but no method of early identification has been widely validated. Aim: To determine if mortality or morbidity in rib fracture patients can be predicted by assessment of frailty, sarcopenia or biochemical markers (troponin or brain natriuretic peptide (BNP)); and to assess for ethnic disparities in outcomes, risk factors and early management. Methods: A single-centre prospective observational cohort pilot study, assessing and assessing the value of frailty, sarcopenia and easily accessible biochemical markers (troponin and BNP), for predicting outcomes (lower respiratory tract infection (LRTI), hospital length of stay (LOS), critical care admission, discharge disposition and mortality) in patients with rib fractures from blunt chest trauma. Results: BNP was significantly associated with risk of LRTI (OR 4.53, p = 0.049). Presence of sarcopenia was associated with fewer admissions to critical care. Several other markers showed trends towards offering predictive value for our outcome measures, but failed to reach statistical significance in this initial pilot sample cohort. Conclusion: BNP and sarcopenia were found to offer some predictive value in the assessment of patients >45 years with rib fractures. Further analysis of a larger sample size is required to further investigate the predictive value of frailty scores in this setting.

Barriers and Enablers to Accessing Follow-Up and Support Following Major Trauma Sarah Logan

Purpose Our research team previously investigated post-traumatic stress disorder (PTSD), anxiety, and depression in patients after major trauma. This sub-study investigated patient satisfaction with their followup care. Methodology Participants were selected from those who presented to Christchurch Hospital and included in the New Zealand Major Trauma Registry (NZ-MTR; Injury Severity Score [ISS] ≥12). Eligible participants were sent a questionnaire about follow-up and support after trauma (including assessments for PTSD, depression, and anxiety). Statistical analysis included Pearson Chi-square tests for independence for discrete variables and Mann-Whitney U tests for continuous variables (both two-tailed). Results 134 patients responded (32.4% response rate). 21(16%) reported difficulties with follow-up care, insufficient follow-up duration the prominent theme. Those who met the threshold for PTSD (p<0.001), anxiety (p<0.001), and depression (p<0.001) were more likely to report discontent with follow-up. 33(24.6%) reported challenges with Accident Compensation Corporation (ACC), primarily related to pressure to return to work, poor communication, and financial stress. Those who met threshold for PTSD (p<0.001), anxiety (p<0.001), and depression (p<0.001) were more likely to report discontent with ACC. Conclusion This study stresses barriers to post-trauma recovery. Those with PTSD, anxiety, and depression are more likely to report dissatisfaction with follow-up and ACC. It's pertinent to note that this is correlational research, so strong causal inferences cannot be drawn. Improving follow-up care and reducing ACC-related pressures, may enhance mental and physical recovery and patient satisfaction after major trauma.

2:06 pm

*Factors associated with 12-month mortality in minor and major trauma: a study of all elderly patients admitted to a tertiary hospital following a traumatic mechanism

Elizabeth Lockie

Purpose Elderly trauma is increasing due to the ageing population. Studies including only major trauma or patients admitted under specialised trauma units exclude a large portion of elderly patients, as most elderly traumas are minor. Prior studies demonstrated that frailty surpasses injury severity score (ISS) to predict mortality. This study explored the association between clinical frailty score (CFS), age and ISS with inhospital and 12-month mortality in an expanded cohort of elderly patients, including minor and major trauma, and admissions under all units at a trauma centre. Methods The study included all patients aged ≥65 years admitted following trauma to the Royal Melbourne Hospital, a Level 1 trauma centre, in 2022. The primary outcomes were in-hospital and 12-month post discharge mortality, with regression analysis to explore factors associated with mortality. Results 1381 patients were included. Increasing CFS increased inhospital and 12-month post discharge mortality. Conversely, increasing ISS increased in-hospital but decreased 12-month post discharge mortality. Multivariate analysis for in-hospital mortality showed CFS and ISS were significant factors. For 12-month mortality, age, CFS and low fall were significant in multivariate regression. Conclusion CFS was associated with in-hospital and 12-month post discharge mortality, while ISS was only associated with in-hospital mortality. While this is not a new finding, this study is unique as it included a complete cohort of elderly patients admitted to hospital following trauma. The importance of frailty in predicting poor outcome cannot be understated. Ensuring frail patients are allocated the needed resources to mitigate poor outcomes is crucial.

2:15 pm

<u>*Mixed Reality for Localisation of Rib Fractures Before Surgical Stabilization: A Pilot Study</u> <u>Jineel Raythatha</u>

Background: Accurate localisation of rib fractures is crucial for successful surgical stabilisation of rib fractures (SSRF). Mixed reality (MR) technology can overlay anatomical imaging onto a patient in real-time, which may facilitate the visualisation of rib fractures, allowing accurate skin surface markings for incision. This pilot study assessed the feasibility of using mixed reality (MR) for rib fracture localisation in SSRF. Methods: This study involved a pre-clinical phase with two healthy patients and a clinical phase with six patients undergoing SSRF in a single tertiary trauma centre. CT scans were transformed into patientspecific 3D holographic models, which were projected through Microsoft HoloLens2TM (HL2) onto the patient after anatomical calibration. The study assessed hologram projection, number of fractures identified, time taken, and distance from skin marking to the fracture site. Iterative improvements to the MR system were implemented throughout the study. Results: Stable and accurate hologram projection was achieved in both phases. In the clinical portion, MR identified 54 rib fractures, including subscapular fractures, compared to 30 identified by US. The mean time to mark all fractures was 9.07 minutes for MR and 10.02 minutes for US. The mean displacement from skin marking to the fracture site was 2.89cm for MR and 2.04cm for US. Technical challenges included distorted surface anatomy and positional variation. Conclusion: MR technology in the setting of SSRF is feasible and facilitates de-novo visualisation of rib fractures. Technical limitations must be addressed before widespread clinical use.

2:24 pm

<u>*Use of BTM in Acute Major Paediatric Burns</u> <u>Samantha Lee</u>

Introduction: Artificial dermal substitutes aim to restore or reconstruct the dermal layer of skin. Novosorb Biodegradable Temporising Matrix ('BTM') has been indicated for the treatment of deep dermal or full thickness wounds, where the entire dermal structure has been lost or damaged. In our experience at the Western Australian Paediatric State Burns Unit, the product has played an important role in the major burns setting; however, there remains a paucity of data with regards to its use in the paediatric population. The aim of this study was to examine the safety and effectiveness of BTM in the paediatric major burns setting. \Box Methods: All paediatric patients whom BTM was applied for an acute burn injury from December 2019 to October 2024 were captured. Medical records, operation reports and medical photography were reviewed; and demographics, burn injury details, percentage of burn treated with BTM, and any perioperative complications were recorded. \Box Results: A total of 14 patients were identified. Majority were male, with an average age of 7.9 years. Burn sizes ranged from 0.5% to 90% total body surface area (TBSA), with a mean %TBSA of 26.2%. The mean percentage TBSA treated with BTM was 15%, with an average time to delamination of 21.5 days. There were 4 (30.7%) cases of infections requiring antibiotics and 5 (38.5%) patients who required regrafting. There was an overall 93% integration rate. Conclusions: BTM offers a safe and reliable option for rapid wound temporisation in the setting of acute major paediatric burns.

2:33 pm

Improving access to acute Plastic Surgery care: The Implementation of a 'Hot Clinic' at Waikato Hospital Thomas Hockey

Purpose This presentation assesses the outcomes of a new Plastic Surgery acute clinic ('hot clinic') introduced at Waikato Hospital to address the challenges faced by a geographically dispersed population requiring acute plastic surgical care. The clinic aimed to enhance patient safety, reduce overload on afterhours services, optimise operating theatre use, and minimize travel and hospital resource use. Methodology From 15 February 2024 to 15 January 2025, the hot clinic served 400 patients (423 bookings), covering a range of conditions, including closed fractures (53.25%), tendon/ligament/nerve injuries (14.5%), nailbed injuries (6.5%), open wounds (5.75%), post-op complications (5.25%), infections (5%), minor burns (4.75%), foreign bodies (3.5%), and other conditions (1.5%). The clinic used a "life or limb" triaging system during night shifts to prioritize urgent cases, allowing less urgent cases to be managed the following day. Results The implementation of the hot clinic improved workflow, reduced wait times, and decreased unnecessary Emergency Department attendances. It also led to reduced operating theatre time/costs and alleviated the burden on after-hours staff. Minor injury patients were able to rest, while complex cases were discussed with SMOs prior to assessment. The clinic allowed for better planning and accommodation of specific patient needs, such as for incarcerated individuals. Conclusion The hot clinic streamlined acute plastic surgery care, optimizing resource use and improving patient outcomes for a geographically dispersed community. Insights gained from the clinic's implementation demonstrate the benefits of triaging, better use of medical staff, and enhanced care planning for diverse patient needs.

2:42 pm

<u>A systematic review of chest drain types and insertion technique for traumatic pneumothorax</u> <u>Fransiska Falconer</u>

The optimal size and insertion technique of chest tubes for managing traumatic pneumothorax remains unclear. While large-bore chest tubes with blunt dissection for insertion have traditionally been used. smaller pigtail catheters and small-bore chest tubes inserted under Seldinger technique are being increasingly considered due to their less invasive nature and potential for reduced patient discomfort. Methods: This study was conducted using PRISMA guidelines. 4,486 papers were identified through database searches. 93 had full text review and 10 studies were included. Key comparisons were made between 14-Fr pigtail catheters, 20-22 Fr small-bore chest tubes, 28-36 Fr large-bore chest tubes and insertion technique.. Outcomes assessed included tube-site pain, effectiveness in pneumothorax resolution, tube-related complications, and need for additional interventions. Results: Smaller tubes and Seldinger technique were associated with significantly lower tube-site pain compared to large-bore tubes. They showed comparable efficacy with regards to drainage and complication rates. Pain scores were lower with small tubes, and duration of hospital stays were often shorter. In cases of stable trauma, small-bore and pigtail catheters were effective and associated with fewer complications such as unresolved pneumothorax or need for additional drains. Conclusions: Small-bore chest tubes, pigtail catheters and Seldinger technique are viable alternatives to large-bore chest tubes for managing traumatic pneumothorax, with reduced tubesite pain and comparable clinical outcomes. While the success rate of smaller tubes is generally comparable, there is a need for further prospective studies to confirm their role and optimize their use in various clinical scenarios

2:51 pm

Beyond the Break: A Gold Coast audit of management and outcomes after lower limb open fractures (Gustilo-Anderson IIIB and IIIC injuries).

Moshin Khan

Purpose To assess reconstructed lower limb Gustilo and Anderson (G&A) IIIb and IIIc injury outcomes in a major trauma centre. Methodology As our institute has no specific database for these injuries we conducted a retrospective assessment of electronic medical records of all open lower limb injuries from June 2022-2024 identifying G&A IIIb and IIIc injuries. Results We identified 60 IIIb and 7 IIIc injuries (mean age 47, range 14-86). 3 primary amputations for IIIb (5%) and IIIc (43%) resulting in 57 IIIb and 4 IIIc reconstructions. The IIIb cohort had: 40 free and 13 local flaps; IIIc: 3 free and 1 local flap. Soft tissue coverage: 7.54 days (IIIb), 4.5 days (IIIc). Limb salvage rate: IIIb 95% (2 secondary amputations), IIIc 75% (1 secondary amputations). Deep infection/osteomyelitis: 36.8% (IIIb), 50% (IIIc). Length of stay: 28.4 days (IIIb), 79.25 days (IIIc). Number of surgical procedures: 4.3 (IIIb), 11.7 (IIIc). Non-union at 6 months: 8.5% (IIIb), 0% (IIIc). Discussion High-energy open leg fracture injuries are commonly seen in major trauma centres. There is a lack of evidence on long term outcomes to support decision-making on limb salvage over primary amputation. In our study reconstructed despite shorer time to soft tissue coverage, IIIc injuries required longer LOS and ultimately required nearly 3 times more procedures with a high delayed amputation rate of 25% (vs 5% in IIIb injuries). A prospective analysis of IIIb and IIIc outcomes across the state may help guide future practice to optimise patient care and health service resource utilisation.

1:30 pm - 2:15 pm The Tom Reeve Lecture - Professor Georgina Long AO (Sydney, Australia)

Named Lecture - Surgical Oncology - Meeting Room C3.4 - Meeting Room C3.5

1:30 pm <u>Neoadjuvant immunotherapy - A game changer in surgical oncology</u> <u>Georgina Long AO</u>

2:00 pm Discussion

1:30 pm - 3:30 pm Updates in Endocrine surgery - What you may not know

Scientific Session - Endocrine Surgery - Meeting Room C4.11

1:30 pm <u>Management of paediatric thyroid cancer in Australia</u> <u>Gideon Sandler, Paul Benitez-Aguirre, David Chung</u>

2:00 pm

Enhancing the safety of thyroid surgery through new technology Brian Lang

Surgical experience and meticulous surgical techniques are the two single most important factors in ensuring optimal patient outcomes and minimizing complications in thyroid surgery. However, it is without doubt that new technologies have also played a vital role in enhancing the safety of thyroid surgery. The present study is aimed to discuss how some of these new and emerging technologies (such as energy devices, intraoperative nerve monitoring, fluorescence-guided image surgery and artificial intelligence) have helped to improve surgical outcomes like shortening operating time and hospital stay, lowering recurrent laryngeal nerve and external branch of the internal laryngeal nerve and lowering risk of hypoparathyroidism after a total thyroidectomy.

2:30 pm

New concepts in the surgical pathology of endocrine organs – parathyroid/adrenal Anthony Gill

In the WHO fifth edition 2022 classification of endocrine neoplasia several developments in the field of endocrine neoplasia have been acknowledged. In the parathyroid previous concepts of primary hyperplasia

(for example in the setting of MEN1) have been replaced by the concept of multiglandular multiadenomatous disease in recognition that each of the nodules within the adrenals are clonal and therefore neoplastic. In the adrenal, the HISTALDO classification for adrenal pathology associated with Conns syndrome was endorsed and clarified. Similar to the parathyroid, concepts of primary adrenal hyperplasia have largely been replaced by the concept of multiglandular multiadenomatous disease

3:00 pm

Interesting Case - Finding the difficult parathyroid Leigh Delbridge

When faced with not being able to find a "difficult parathroid", the keys to successful completion of the procedure at the time, or successful re-operation, are : 1. review the localisation studies, specifically the images rather than the report. For example nearly 50% of abnormalities reported as a "lower parathyroid adenoma" turn out to be a descended upper parathyroid lying in a para-oesophageal location on the prevertebral fascia. This is the most common cause of a "missing" adenoma as the surgical approach to the pre-vertebral fascia is very different to dissection of the lower pole/thyrothymic region. 2. develop an "embryological based game plan" for further surgical exploration. This depends on assessing which normal glands have already been identified and aligning the "missing" gland with associated branchial cleft structures. For example Parathyroid III is associated with the thymus and the vagus nerve, so a missing lower parathyroid gland leads to an initial search of the lower lobe of the thyroid, the thymus, and the carotid sheath down to the sternal notch. Parathyroid IV is associated with the internal carotid artery and neural crest elements including C-cells, so a missing upper parathyroid gland leads to a search around the posterior thyroid including Tubercle of Zuckerkandl, pre-vertebral fascia, and upper half of the carotid sheath. Embryological symmetry is also important with contralateral parathyroid location frequently a clue to the missing gland, eg a normal intrathymic parathyroid on one side should lead to a thorough thymectomy, including the upper sternal component, on the contralateral side.

3:15 pm

Interesting Case - The difficult adrenal Peter Campbell

04 May 2025

2:00 pm - 3:30 pm Complex Aortic Pathology and Pulmonary Embolism Treatment

Scientific Session - Vascular Surgery - Meeting Room C4.1

2:00 pm

Intermediate to high risk PE - when to consider reperfusion therapy? A respiratory physicians perspective Edmund Lau

Intermediate to high risk PE represents a clinical challenge owing to the heterogeneity of presentation. A key decision faced by clinicians is whether reperfusion therapy is required. Rational decision making involves consideration of urgency of reperfusion therapy, available modalities for reperfusion therapy, and bleeding risk. There remains major gaps in the current literature to guide optimal therapy. This talk will present a respiratory physician's perspective on when to consider reperfusion therapy in acute PE.

2:15 pm

Intermediate to high risk PE - when to consider reperfusion therapy? A vascular surgeons perspective Laurencia Villalba

2:25 pm Planning, techniques and outcomes of Endovascular Arch Repairs Anastasia Dean

2:35 pm <u>Management of complicated dissections - The Australian Experience</u> <u>Raffi Qasabian</u>

2:45 pm <u>ClotTreiver thrombectomy for the aorto-iliac segment</u> <u>Laurencia Villalba</u>

2:55 pm <u>Management of Malperfusion in Aortic Dissections - the US experience</u> <u>Steven Maximus</u>

3:05 pm <u>An update on the workforce dashboard</u> <u>Mark Jackson</u>

3:10 pm Discussion

2:00 pm - 3:30 pm Future Challenges and Directions in Indigenous and Maori Healthcare

Scientific Session - Indigenous Health - Meeting Room C4.3

2:00 pm <u>Seeing the Future in Indigenous Eye Health</u> <u>Kristopher Rallah-Baker</u>

2:20 pm

Public Bariatric Surgery in Aboriginal and Torres Strait Island Patients Daniel Chan

2:40 pm

<u>Colorectal Cancer Screening for Maori: Bowel Cancer Doesn't Wait- Why Should Maori?</u> <u>Julia Tairua-Doyle</u>

Māori are more likely to be diagnosed with bowel cancer before the age of 60 than non-Māori, yet the New Zealand Bowel Screening Programme (BSP) begins at age 60. The Government's recent decision to implement a universal screening age of 58 for all New Zealanders disregards ethnicity-specific data and equity considerations. A phased rollout of pilots had been underway to offer screening from age 50 for Māori, aligning with their earlier risk profile. However, this targeted measure has now been withdrawn. This one-size-fits-all approach will increase cancer deaths and reduce life expectancy for Māori, further exacerbating existing health inequities. Over half of bowel cancers in Māori (58% of females and 52% of males) occur before age 60, compared to under one-third in non-Māori. This delay in eligibility contributes to late diagnoses, poorer outcomes, and reinforces systemic barriers to timely care. While Māori and non-Māori share similar age-specific incidence rates, Māori are affected earlier due to having a younger population. Challenges also include lower participation, limited access to culturally safe services, and colonoscopy capacity. Although New Zealand remains behind international screening standards, targeted approaches are feasible. Waikato DHB completed a successful pilot screening Māori from age 50, with Tairāwhiti and MidCentral pilots ongoing. The recent change to apply a universal approach to bowel screening in Aotearoa fails to uphold te Tiriti o Waitangi obligations and perpetuates health injustice.

3:00 pm

<u>Operating Beyond the Body - Cultural Safety in Surgical Care</u> <u>Damien House</u>

3:20 pm Discussion

2:00 pm - 3:30 pm LEADERSHIP IN SURGERY - IS TRAINING REQUIRED?

Scientific Session - <u>Younger Fellows</u>, <u>Trainees Association</u>, <u>Surgical Education</u> - Meeting Room C2.3 - Meeting Room C2.2

2:00 pm <u>How should we train surgeons to be leaders?</u> Shehnarz Salindera

The healthcare system is becoming increasingly complex and the need for clear and courageous medical leadership has never been stronger. Surgeons must be leaders not only in their everyday clinical work but also for their trainees and in the broader medical system. This paper will explore how we currently train for leadership and propose how we could better prepare our future leaders for the challenges of the complex healthcare system.

2:20 pm

Professional coaching to enhance leadership performance

<u>Sonja Cronjé</u>

Leadership in surgery and healthcare requires more than technical expertise; it demands self-awareness, confidence, adaptability, and the skills to navigate complex challenges. Yet, traditional medical training offers limited support for developing these critical skills. Professional coaching bridges this gap by providing structured, evidence-based support tailored to the unique demands of healthcare leadership. This is particularly valuable for professionals transitioning from training to consultant roles, as well as those taking on leadership responsibilities or navigating other career stages. This presentation will explore how coaching differs from mentoring and training, and how it helps healthcare professionals overcome self-doubt, manage competing demands, and enhance leadership effectiveness. Drawing on real-world experiences, it will highlight coaching's impact on leadership development, resilience, and performance, with practical advice on how to engage with coaching to support healthcare leaders at various stages of their careers.

2:40 pm

The WSLHD FLASH program and strengthening the healthcare team

<u>Jane Bolster</u>

Background: Effective clinical leadership is critical for patient safety, staff well-being, and system-wide improvements. However, leadership education is not routinely embedded in health professional training. The Fostering Leadership Across Systems in Health (FLASH) program was designed to address this gap, providing a seven-month, evidence-based leadership course for doctors, nurses/midwives, and allied health clinicians in Western Sydney Local Health District (WSLHD). Program Description: FLASH is an interdisciplinary, interactive program incorporating expert-led workshops, leadership coaching, and shadowing experiences with senior leaders. Interprofessional Education (IPE) workshops, including a change management simulation, foster collaboration across disciplines. Participants: Since 2021, approximately 355 clinicians (145 doctors, 110 allied health professionals, 100 nurses/midwives) have completed FLASH. Outcomes are assessed through anonymous surveys and independent focus groups. Early findings indicate improved confidence, leadership engagement, and system-wide impact. Results & Impact: Participants report increased self-awareness, interpersonal skills, and advocacy confidence, leading to positive system changes and cross-network collaboration. FLASH fosters a sense of belonging and retention among clinicians. Conclusion: FLASH is a unique interprofessional leadership program addressing a critical training gap.

3:00 pm

<u>'Strengthening surgical leadership: Insights from the Queensland Surgical Mortality Audit</u> <u>Justin Gundara</u>

3:20 pm Discussion

2:00 pm - 3:30 pm Resectional quandaries

Scientific Session - Upper GI Surgery - Meeting Room C4.6 - Meeting Room C4.7

2:20 pm Colonic conduits - how, where, when, why? Iain Thomson

2:40 pm <u>Management of TOF post oesophagectomy</u> <u>Charbel Sandroussi</u>

3:00 pm

<u>Feeding jejunostomy in OG cancer resections - should we still be using them? (& how I do it...)</u> <u>Alexandra Gordon</u>

3:20 pm Discussion

2:00 pm - 3:30 pm Survivorship & Surveillance

Scientific Session - Breast Surgery - Meeting Room C4.9 - Meeting Room C4.10

2:00 pm

<u>Contrast Enhanced Mammography for Surveillance</u> <u>Merribel Kyaw</u>

2:20 pm

<u>Demographics, characteristics and management of women with a new breast cancer diagnosis after</u> previous breast cancer - The BQA perspective Melissa Bochner

2:40 pm

PROMS - Overview & Differences between surgeries

Jocelyn Lippey

PROMS - Overview & Differences between surgeries Patient Reported Outcome Measures are validated, standardised sets of questions which when used routinely improve patients' quality of life and survival (1). They can be use prospectively to direct individual care and help manage symptoms or retrospectively to assess the patient's perspective on the differences between two alternate treatments. This talk will cover an overview of PROMs for breast cancer surgery broadly including their origins and evidence as well as discuss BRENDA, the St. Vincent's Melbourne database which uses incorporated PROMs for cancer patients to direct care and inform patients about real life outcomes in our unit. 1.Balitsky AK, Rayner D, Britto J, Lionel AC, Ginsberg L, Cho W, . . . Guyatt GH. Patient-Reported Outcome Measures in Cancer Care: An Updated Systematic Review and Meta-Analysis. JAMA Netw Open. 2024;7(8):e2424793.

3:00 pm

<u>A new treatment approach for induration and capsular contraction in breast surgery patients</u> <u>Amanda Hannaford</u>

One of the greatest challenges facing breast cancer patients in their recovery from breast surgery and radiation therapy is the scarred, indurated and fibrosed tissues that may be left behind. The current approach of direct massage (passive or active) often has limited benefits and leaves patients frustrated. It has become evident in clinical practice that more gentle, indirect approaches may be far more effective at softening and resolving these thickened tissues. In contrast to this, capsular contracture patients who are also a challenging cohort to manage conservatively, appear to respond favourably to a more direct and interventionist approach by the manual therapist than the ones currently applied.

3:20 pm Discussion

2:00 pm

<u>What would you do if it was you?</u>

<u>Michael Solomon, Steven Wexner, Tamara Glyn, Chris Harmston, Raymond Yap, David Clark, Stephen Smith,</u> <u>David Lubowski</u>

04 May 2025

2:15 pm - 3:30 pm MELANOMA

Scientific Session - Younger Fellows, Surgical Oncology - Meeting Room C3.5 - Meeting Room C3.4

2:15 pm

<u>Neo-adjuvant combination of systemic therapy + loco-regional therapy (ILP/intralesional)</u> <u>Winan van Houdt</u>

2:35 pm

The evolving role of sentinel lymph nodes (SLNB) in melanoma Andrew Barbour

2:55 pm <u>Mlst-3</u>

<u>Alexander van Akkooi</u>

The Multicentre Selective Lymphadenectomy Trial – 3 (MSLT-3) is a phase III, International Multicentre, Randomised Controlled Trial of Selective Index Lymph Node (ILN) Resection versus Therapeutic Lymph Node Dissection (TLND) After Neoadjuvant Immunotherapy for Stage IIIB-D Melanoma. A total of circa 1500 patients will be randomised to ILN resection or TLND. All patients will have a magnetic, radioactive, or sonographically visible marker placed in the largest metastatic lymph node (= Index Lymph Node [ILN]) at baseline, prior to the start of NAT. All patients will receive 6 weeks of standard NAT (anti-PD1 immunotherapy based), then undergo the randomly assigned surgical procedure. In the ILN arm, only the index node will be removed through a targeted resection (similar to a post-chemotherapy sentinel node procedure in breast cancer). The pathological response to immunotherapy will be assessed according to the International National Consortium classification (INMC)[13]. Patients with a major pathologic response (MPR) (defined as ≤10% of viable tumour cells in the node nodes) in each surgical arm will form the analysis group for the study objectives. Patients with a MPR in the ILN arm will have no further surgery and those without a MPR in the ILN arm will have a TLND in a second procedure. All patients will be followed-up with periodic imaging and physical examinations for disease surveillance for up to 10 years.

3:15 pm Discussion

04 May 2025

3:30 pm - 4:00 pm AFTERNOON TEA - SUNDAY

Catering - *Cross Discipline* - Hall 5

04 May 2025

4:00 pm - 6:00 pm PLENARY SESSION - DR GLAUCOMFLECKEN AND A SURGICAL AFFAIR: QUESTION TIME WITH TONY JONES (TICKETED EVENT)

Plenary Session - *Cross Discipline* - Darling Harbour Theatre

4:00 pm

Dr Glaucomflecken's Incredibly Uplifting and Really Fun Guide to American Healthcare Dr Glaucomflecken (Will Flanary)

4:45 pm

<u>A SURGICAL AFFAIR: QUESTION TIME WITH TONY JONES</u> <u>Mark Frydenberg, Danielle McMullen, Michael Holland MP, Bridget Clancy, Catherine McDougall, Brett</u> <u>Goods</u>

04 May 2025

6:00 pm - 7:00 pm ANZ CHAPTER OF THE ACS NETWORKING FUNCTION

Cocktail - *Cross Discipline* - Foyer Level 2

6:00 pm - 6:30 pm GSA ANNUAL GENERAL MEETING

Business Meeting - General Surgery - Meeting Room C4.5

6:00 pm <u>AGM AGENDA</u> <u>Sarah Benson</u>

6:00 pm - 7:00 pm RCSed Reception

Cocktail - *Cross Discipline* - Meeting Room C3.6

6:00 pm <u>RCSEd Boilerplate</u> <u>Rowan Parks</u>

04 May 2025

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

Speciality Dinner - General Surgery, Rural Surgery, Hernia Surgery

Venue: 12 Micron

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

Speciality Dinner - Breast Surgery, Endocrine Surgery

Venue: Pier One - Water Room

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

Speciality Dinner - <u>Surgical Education</u>, <u>Upper GI Surgery</u>, <u>Transplantation Surgery</u>, <u>HPB Surgery</u>, <u>Bariatric</u> <u>Surgery</u>

Venue: ChinChin

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

Speciality Dinner - Colorectal Surgery

Venue: The Loft - Jones Bay Wharf

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

Speciality Dinner - Vascular Surgery, Trauma Surgery

Venue: 6HEAD - Bay 11

04 May 2025

8:00 pm - 10:30 pm SECTION DINNER (TICKETED EVENT)

Speciality Dinner - Surgical Oncology

Venue: Grana, Ground Floor/5-7 Young St, Sydney NSW 2000

05 May 2025

7:00 am - 8:30 am ANZASM Clinical Directors meeting

Business Meeting - ***Cross Discipline*** - Meeting Room C3.3

Masterclass - <u>Surgical Education</u>, <u>Hernia Surgery</u>, <u>General Surgery</u>, <u>Rural Surgery</u>, <u>Trauma Surgery</u> - Meeting Room C4.8

7:00 am Emergency Laparotomy – How to plan access to a Hostile Abdomen Mary Langcake

7:12 am <u>Can't close the abdomen - Management of the viscera and abdominal wall</u> <u>Grant Christey</u>

7:24 am <u>Closing the abdominal wall - Acute</u> <u>James McKay</u>

7:36 am When the wall won't close Danette Wright

7:48 am Discussion

7:00 am - 8:20 am RACS Trauma Committee meeting

Business Meeting - Trauma Surgery - Meeting Room C4.3

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

Breakfast Session - Women in Surgery - Meeting Room C4.4

7:00 am <u>AGM</u> <u>Upeksha De Silva</u>

7:10 am <u>My Journey with Consent Labs: Lessons in Advocacy</u> <u>Joyce Yu</u>

05 May 2025

7:30 am - 8:20 am GSA BOARD MEETING

Business Meeting - General Surgery - Meeting Room C2.1

05 May 2025

Plenary Session - ***Cross Discipline*** - Darling Harbour Theatre

8:30 am

Setting standards in excellence: Role of Clinical trials Payal Mukherjee

8:35 am <u>Clinical trials: Why bother?</u> <u>David Beard</u>

8:50 am Australian innovation ecosystem: Getting an idea from bench to clinical trials Peter Choong

9:05 am Building a Research Community: The Rise of Student and Trainee-Led Collaboratives in AAoNZ Cameron Wells

9:15 am

<u>Panel Discussion: System initiatives to foster clinical trials in Australia</u> <u>Teresa Anderson, Kylie Sproston, David Beard, Peter Choong, Laurencia Villalba, Payal Mukherjee</u>

05 May 2025

10:00 am - 10:30 am MORNING TEA - MONDAY

Catering - <u>*Cross Discipline*</u> - Hall 5

05 May 2025

10:30 am - 12:30 pm Developments in Trauma Surgery - What's best in 2025?

Scientific Session - Trauma Surgery - Meeting Room C3.6

10:30 am <u>The role of surgeons in Major Trauma - A USA perspective in 2025</u> <u>Steven Maximus</u>

10:50 am <u>Spinal Cord Injury in 2025 - What are the latest developments?</u> <u>Jonathon Ball</u>

11:05 am Orthopaedic Military Surgery in neer peer conflict: learning from recent war and conflict Andrew Ellis

11:25 am Updates in Abdominal Trauma Surgery – Laparotomy or Laparoscopy? Dieter Weber 11:40 am Orthopaedic Trauma - Innovations, tips and optimal tactics Joseph Isaacs

12:00 pm

<u>Traumatic abdominal wall injuries – Best management in 2025</u> <u>Cino Bendinelli</u>

12:15 pm

Advances in Vascular Surgery for the Acute Trauma patient Steven Maximus

10:30 am - 12:30 pm Driving Innovation and Excellence in Surgical Leadership

Scientific Session - Surgical Leaders - Meeting Room C4.11

10:30 am <u>Coaching 101 and Coaching for Healthcare Leaders</u> <u>Sarah Dalton</u>

11:30 am Leadership Transition: Leading beyond the operating room Karen Luxford

12:00 pm Academic Leadership in Surgical Innovation Sarah Aitken, Sarah Aitken

10:30 am - 12:30 pm GENERAL SURGICAL TRAINING - GETTING IN AND GETTING OUT

Scientific Session - <u>Rural Surgery</u>, <u>Trainees Association</u>, <u>Hernia Surgery</u>, <u>General Surgery</u> - Meeting Room C4.5

10:30 am <u>A Trainees Perspective</u> <u>Sarah McLain, Kate McKellar Stewart</u>

10:50 am <u>A UK perspective on Surgical Training</u>

Christian Macutkiewicz

Surgical training in the UK is generally well-regarded and considered to be of high quality. The training pathway for surgeons in the UK involves a structured program that includes a combination of supervised practice, theoretical education and hands-on experience in various surgical specialties. The Shape of Training Review revealed a greater need for generalists and that there was too much emphasis on specialisation. This is contradictory to the aspirations of our trainees who see Emergency General Surgery as an unattractive career. Training indicative numbers have fallen and there is still a COVID-19 effect on training with decreased access to elective lists and the elective backlog means that weekend lists are not training lists, with an emphasis on throughput rather than training. To improve the situation, novel training programs are presented to improve the experience and training of tomorrow's surgeons.

11:10 am

Being Strategic About GSET Selection Richard Turner

Selection into General Surgery Education and Training (GSET) is becoming increasingly competitive, primarily due to the limited capacity of host institutions. It also coincides with a range of personal and professional challenges faced by prospective trainees at this stage of their careers. To be eligible by the

application closing date, junior doctors must have passed the Generic Surgical Sciences Examination (GSSE), completed minimum required rotations in General Surgery and Critical Care, demonstrated proficiency in specified procedural skills, and secured support from four consultant surgeons. Once eligibility is confirmed, candidates' CVs are scored based on rurality, research, educational qualifications, and teaching experience. These scores are combined with referee reports from non-General Surgeon health professionals. The combined total is used to rank applicants, with the top 50% progressing to a structured, face-to-face interview that is subsequently scored. Given the complexity of the GSET selection process and its intersection with other competing demands, a clear understanding of the process is vital for both prospective trainees and their mentors. Certain strategies are outlined to help maximise the likelihood of success.

11:30 am How to get a consultant job - A New Zealand experience Maree Weston

11:50 am <u>The Exam, Choosing a Fellowship and finding a Job</u> <u>Wendy Liu</u>

12:10 pm Discussion

10:30 am - 11:00 am KEYNOTE LECTURE - ASSOCIATE PROFESSOR BRENESSA LINDEMAN (BIRMINGHAM, USA)

Keynote Lecture - Surgical Education - Meeting Room C4.9 - Meeting Room C4.10

10:30 am <u>Objectivity in Surgical Assessment: A Sisyphean Task?</u> <u>Brenessa Lindeman</u>

10:30 am - 11:00 am KEYNOTE LECTURE - Dr Susan O'Dwyer (Brisbane, AUSTRALIA)

Keynote Lecture - Health Policy & Advocacy - Meeting Room C4.6 - Meeting Room C4.7

10:30 am

Recent AHPRA reforms and implications for surgeons and RACS Susan O'Dwyer

In 2024 the Medical Board of Australia implemented the Expedited Pathway for Specialist International Medical Graduates. This presentation will explore the origins/development/implementation of the pathway, some of the early data regarding candidates through the pathway and what the future holds. Cosmetic Surgery continues to be an area of focus for the Medical Board and the release of guidelines for all registered professions in the area of cosmetic nonsurgical procedures is imminent. Latest notification data from the Medical Board will be shared including the changes to the management of low risk notifications and health notifications. In addition recent changes to the National Law with regard to permanent public notification of sexual misconduct and the banning of non-disclosure agreements.

10:30 am - 12:30 pm SARCOMA

Scientific Session - Surgical Oncology - Meeting Room C3.4 - Meeting Room C3.5

10:30 am <u>Neo-adjuvant therapy for retroperitoneal sarcoma</u> <u>Winan van Houdt</u>

11:00 am Discussion

11:15 am

The role of Isolated Limb Perfusion (ILP) in the contemporary treatment of sarcoma Hayden Snow

11:35 am

The Importance of Pre-Operative Biopsy in Retroperitoneal Sarcoma, and the Role of Multivisceral Resection David Coker

11:55 am

Sarcoma Radiation Treatment and Surgery at Specialised Centres, and ANZSA Mission Angela Hong

12:15 pm Discussion

10:30 am - 12:30 pm

THE CHANGING STATE OF HERNIA CARE AND DEVELOPING HERNIA SERVICES FOR FUTURE NEEDS

Scientific Session - Rural Surgery, Hernia Surgery, General Surgery - Meeting Room C4.8

10:30 am

Hernia care in Australia

Rodney Jacobs

Despite having a cohort of hernia surgeons in Australia with deserved international reputations, there are still many issues relating to hernia repair outcomes: patients with chronic pain; wound and mesh infections; fistulae; botched AWR's; unknown rates of ventral and inguinal hernia recurrence; and neglected abdominal wall disasters. In an era of increasing complexity of abdominal wall surgery, more legislation and increased litigation; the current situation provides several clinical challenges starting with getting hernia repair right the first time, preventing complications, reducing hernia recurrence and managing complex abdominal wall problems. These problems have arisen for multiple reasons. Inappropriate patient selection, inadequate patient optimization and poor choice of operative approach, combined with poor execution, failure to recognize and manage complications, and insufficient follow up. The result of a lack of training in the basics, inconsistent application of "best practice", wide variation and misuse of advanced techniques and technology, lack of access to "specialists" (or perhaps a reluctance to refer?) and an inability to recognize and reluctance to refer complex cases till too late. Additionally, there are problems resulting from the lack of a national hernia/mesh implant registry, poor MBS remuneration and the safe integration of new technology and mesh. The solution lies in education, including changes to GSET and the set-up of a post fellowship hernia program based in accredited centres of excellence. Most importantly, individual surgeons need to accept responsibility and have the insight to remain within their level of competence.

10:40 am

<u>Hernia Care in Aotearoa New Zealand</u> <u>Grant Christey</u>

10:50 am <u>Value Hernia Care in General Surgery</u> Frederick Betros

<u>Frederick Betros</u> It is estimated that over 70,000 hernia procedures were performed in Australia and New Zealand in 2023. It is also estimated that over 1,000,000 hernia procedures are performed annually worldwide. The substantial cost to the community and the healthcare system in treating this condition cannot be overstated. It is also accepted that a proportion of that cost is attributable to diagnostic investigations and subsequent surgical procedures which are considered of low value. The need to ensure that high value hernia surgery is delivered to patients is examined in this session. More importantly, the need to avoid low value investigation and procedures in an ever-increasing resource constrained clinical environment is discussed.

11:00 am <u>Complex Hernia Care in a Rural Setting</u> <u>Stephen Jancewicz</u>

Dr Stephen Jancewicz will present a regional general surgeon's experience of providing a complex abdominal wall hernia service. The pathway, resources and collegiality factors relating to such service delivery shall be presented.

11:10 am Discussion

11:30 am

<u>The H.E.R.N.I.A. Framework: Principles for Safe and Effective Hernia Repair – A Guide for General Surgeons</u> <u>Oliver Fisher</u>

11:40 am Dedicated Complex Hernia Units – It's Time Kellee Slater

11:50 am <u>CQR – Improving Quality in Hernia Care</u> <u>Douglas Fenton-Lee</u>

12:00 pm

Robotic Inguinal Hernia: A Template for the Future Stephen Pillinger

Inguinal hernia repair (IHR) is one of the most performed procedures in general surgery, with over 50,000 operations performed in Australia annually. There is clinical equipoise regarding the increasing global adoption of robotic inguinal hernia repair as a cost-effective, safe minimally invasive option. Most comparitive studies are limited by the inexperience of the robotic surgeons, or structure of the units in which they are conducted. The present study analysed the short-term outcomes of R-TAPP IHR when performed in a dedicated centre with high volume robotic surgeons, anaesthetics and theatre staff, following a protocol driven day only procedure. The primary outcome was to report postoperative pain scores, and analgesic use in the first 28-days. The secondary outcomes were to investigate operative times, length of stay, operative complications, recurrence and 30-day readmission rates. Compared to the literature, this study shows near equivalent if not better clinical effectiveness regarding parameters such as operative time, day of surgery discharge, POD1,7 and 28 pain scores and 30-day complication events This study provides a template for widespread adoption of robotic inguinal hernia repair.

12:10 pm Discussion

10:30 am - 12:30 pm THREE THINGS IN LIFE ARE CERTAIN - DEATH, TAXES AND COMPLICATIONS

Scientific Session - Rural Surgery - Meeting Room C4.2

10:30 am

Recertification and renewal of skills in colonoscopy Grace Lim

10:49 am

Watch and wait in the era of total neoadjuvant therapy, avoiding pitfalls and understanding outcomes Chris Harmston

11:08 am

Failure to rescue after major abdominal surgery David Watters

The ability to rescue a patient suffering complications after major abdominal surgery is influenced by what happens before, during and after surgery. Before: Some patients are fit enough for surgery but not for a complication. All patients undergoing major surgery should have a frailty and risk assessment.

Comorbidities should be optimised and prehabilitation, if needed, provided. Goals of care incorporating patient preferences, values and expectations should be documented and be part of shared decision making. During: SipTilSend; Team briefing, preoperative review of results, careful dissection, willingness to obtain a second opinion when there are unexpected findings, having a second surgeon present for complex procedures, and clear postoperative instructions around anticoagulation. After: Provide the right level of early postoperative monitoring in ICU/HDU or ECU/ARRC. Recognise and respond to deterioration promptly. Don't delay URTT (HAC4) if indicated. Prompt recognition & management of complications will reduce failure to rescue rates. FTR rates are a better indication of quality than URTT. Reflect, (Peer) Review, Report on outcomes. Learn from complications that occur. Share your learning.

11:27 am <u>The Invisible Victim</u> <u>Sandra Krishnan</u>

11:46 am

<u>Can teaching Human Factors in surgical training help reduce complications? Two out of three ain't bad!</u> <u>Susan Velovski</u>

12:05 pm Discussion

10:30 am - 12:30 pm WOMEN IN LEADERSHIP IN OTHER FIELDS

Scientific Session - Women in Surgery, Younger Fellows - Meeting Room C4.1

How has your gender positively influenced your leadership success? What strengths does being a woman bring to your role?

10:30 am

Women in Surgery: An Analysis of Mental Health, Stress Perception, and Resilience Hannah de Wet

Purpose Although the representation of women in surgical fields is increasing, challenges such as gender bias, demanding work conditions, and balancing career with personal responsibilities persist. This study aims to investigate the stressors affecting female surgeons, assess their impact, and explore the resilience strategies employed to mitigate these effects. Methodology A literature review was conducted using PubMed to identify peer-reviewed articles on mental health, stress perception, and coping among female surgeons. From the initial search, 64 articles were identified, with additional studies manually added from the references of reviewed literature. Results The review highlighted key stressors for female surgeons, including workplace culture, gender bias, and sexual harassment. Resilience-building strategies, such as mindfulness and institutional support, were found to positively impact mental health and stress management. Female surgeons face unique stressors stemming from the demands of the profession, systemic gender biases, and entrenched cultural norms, leading to significant mental health challenges like burnout and anxiety. While individual resilience strategies, like mindfulness, show some efficacy in mitigating these issues, systemic factors remain largely unaddressed. Gendered expectations and exclusionary workplace cultures continue to hinder progress, underscoring the need for structural reforms to improve the professional environment and promote the well-being of female surgeons. Conclusion While resilience strategies offer some relief, substantial policy reform and a shift in workplace culture are crucial to creating a more supportive and equitable environment for women in surgery.

10:40 am Leading inclusivity in male dominated sport Alex Blackwell

11:00 am <u>The Power Within: Discipline, Confidence, and Self-Belief</u> <u>Rasika Deheragoda</u>

11:20 am Leading through Division Callisia Clarke 05 May 2025

11:00 am - 12:30 pm HEALTH POLICY AND ADVOCACY

Scientific Session - <u>Health Policy & Advocacy</u>, <u>Trainees Association</u> - Meeting Room C4.7 - Meeting Room C4.6

11:00 am

<u>Beyond Policy - Difficult Professional Encounters - Cases Panel Discussion</u> <u>Kerin Fielding, Ming Yew, Owen Ung, Sanjeev Naidu, Tracy Kerle, Robert Cusack</u>

11:50 am

The College has an opportunity to provide the leadership required to improve participation in Australian <u>Clinical Quality Registries.</u>

Robert Aitken

Participation, high case ascertainment and near complete data are essential for high quality Clinical Quality Registries (CQR). Many counties now mandate participation in priority CQRs. The Commission's Framework for Australian CQRs demands that quality data be reported. There are many long-standing barriers to participation in Australian CQRs and participation is poor. Only 2 surgical CQRs on the Commission's website achieve the recommended 95% participation rate. This is unsatisfactory level of engagement will only improve if a culture of participation is established. The culture of any organisation is set by its leadership. The Commission has indicated it will explore linking CQR participation to hospital accreditation and Continuous Professional Development (CPD). This provides the College with an opportunity to demonstrate its commitment to surgical CQRs. Both the College and its Fellows have an ethical and professional responsibility to benchmark the quality of their care. Neither the College nor its Fellows can defend or justify their on-going failure to advocate and act where they can. The College should commit to linking CQR participation to hospital accreditation and individual CPD and so establish the culture of participation that others have not provided. The starting point would be to formalise mortality and morbidity meetings. This would include a minimum consultant attendance and formal reporting of relevant specialty CQR participation and compliance, including the College's mortality audit. Hospital participation in CQRs should be openly published. The risk of being disaccredited would have meaningful consequences for both practitioners and hospitals and so provide a powerful incentive to participate.

11:55 am

<u>Surgeons as Advocates: Shaping Policy Beyond the Operating Room</u> <u>Baneen Alrubayi</u>

Surgeons and healthcare professionals are uniquely positioned as trusted voices within their communities. This 60-minute panel discussion will explore how clinicians can extend their influence beyond the operating room to shape health policy, address inequities, and drive meaningful improvements in patient outcomes and healthcare systems. The session will begin with a keynote address by Associate Professor Kerin Fielding, President of the Royal Australasian College of Surgeons, who will outline the College's advocacy efforts and its vision for equitable healthcare. Moderating the panel is Dr. Baneen Alrubayi, a resident with a passion for bridging clinical practice and systemic reform. The panel will feature consultant surgeons and physicians who have transitioned their clinical expertise into leadership roles, including parliamentary advocacy, steering committees, and grassroots community initiatives. Panellists will share their personal journeys, motivations, and strategies for bridging the gap between clinical practice and policy reform. They will discuss the unique challenges and opportunities they have encountered while advocating for patients, healthcare staff, and communities, including rural and remote populations, culturally and linguistically diverse (CALD) groups, and women in medicine and leadership. The discussion will focus on how clinicians can effectively shape health initiatives at both local and national levels. Attendees will leave equipped with actionable insights to expand their roles as healthcare advocates, using their expertise to influence policy, champion equity, and drive lasting change. This session will challenge participants to rethink their impact, not just in the operating room, but as catalysts for healthier, stronger communities.

12:00 pm

Panel Discussion: Environmental Sustainability and Eliminating Low Value Care: A Round Table discussing Implementing Change Hayden Snow, Stanley Chen, Russell Hodgson, Neil Merrett

11:00 am - 12:30 pm **RESEARCH PAPERS**

Scientific Session - Surgical Education, Trainees Association - Meeting Room C4.10 - Meeting Room C4.9

11:00 am

Improving Australia's national surgical mortality audit using Quality Improvement Statistical Process Control charts

Robert Aitken

Purpose The aim of this study was to determine if the Australian and New Zealand Audit of Surgical Mortality (ANZASM) could use near real time Statistical Process Control (SPC) Quality Improvement (QI) methodology to provide hospitals with more timely and relevant feedback. Methodology This was a retrospective analysis of data prospectively collected between 2019 and 2023. The ANZASM has a 99% case ascertainment rate. Post-operative and non-operative deaths, associated unplanned events (e.g. returns to theatre), surgical complications and Clinical Management Issues including adverse events were presented using funnel plots (to show outliers) and SPC charts to demonstrate longitudinal variation. The data was explored at state, hospital and specialty level. Results There was a progressive overall fall in the annual number of deaths. The funnel plots revealed outliers at both state and hospital level. National data for most specialties and large hospitals could also be reported. The quarterly SPC charts for hospitals identified developing special cause variation some 18 months before the traditional format in the current annual reports. Conclusion ANZASM is now finalising cases in a more timely manner. If this QI data is promptly returned it can be discussed at monthly mortality and morbidity meetings and would permit early discussion of any developing special cause variation. That would likely reduce deaths and improve other outcomes. The progressive overall fall in mortality is likely to be a consequence of the long term education imparted through ANZASM. This reporting will be greatly facilitated by the use of near real time dashboard.

11:08 am

Implications of failing the surgical fellowship (FRACS) examination on the learning experiences of Australian surgical trainees.

Gausihi Sivarajah

11:16 am

International Comparison of Surgical Education in Australia and The Netherlands: Perspectives of Surgeons and Trainees Isaac Ealing

11:24 am

What Surgeons Should Tell Anaesthetists

Nathan Ip

Purpose Effective communication between surgeons and anaesthetists is crucial for safe patient care. This audit assesses the quality of surgical emergency inpatient referrals at a tertiary hospital, identifying areas of improvement. Methodology Data was collected via survey forms at the Anaesthetists in Charge (AIC) desk (June 21–Oct 31, 2024). Six communication aspects were identified from the literature, college guidelines, and surgeon-anaesthetist discussions: 1. Purpose of referral 2. Understanding of procedure 3. Relevant medical details 4.Logistic factors 5.Perioperative medications 6.Overall presentation Referrals were scored using a Likert Scale (0 = not covered, 3 = excellent). The data included the referral date, AIC's comments, speciality, and referring doctor's seniority. Results 57 referrals were recorded, with General Surgery contributing most (35.1%). HMOs provided 43.9% of referrals. The median score, IQR and range were 13, 8 and 17 respectively, indicating substantial variation in surgical referral quality. Using Braun and Clarke's thematic analysis and interpretation-focused coding, three themes and seven subthemes emerged: 1. Information: Quality, comprehensiveness 2. Presentation: Clarity, length, tone 3. Suitability: Referral content, referring doctor The suitability theme highlights the need for senior surgeons to support juniors making complex referrals. Information emerged as the most recurrent theme, suggesting that accurate information was the most important part of a surgical referral. Conclusion Variability in referral quality is notable, with accurate

information being most important. Supporting surgical team members could enhance their communication with anaesthetists, promoting safer care.

11:32 am

The Incidence and Characteristics of Fatal Non-technical Errors: An 8-year Audit of Australian Surgical Mortality

Jesse Ey

Aim: To investigate the incidence and characteristics of fatal non-technical errors using data from the Australian and New Zealand Audit of Surgical Mortality (ANZASM). Methods: All surgical deaths reported to ANZASM from 2012-2019, flagged with an Adverse Event or Area for concern were retrospectively assessed. The incidence of fatal non-technical errors, predictors of non-technical error occurrence, and change in nontechnical error incidence over time were assessed using descriptive statistics, multi-variable analyses, and SPC charts respectively. Results: 30 971 surgical mortalities were reported to ANZASM from 2012-2019. 3695 met inclusion criteria and were analysed. Non-technical errors linked to death were identified in 63.7% of cases. Of these, 58.4% had Decision Making errors, 56.4% had Situational Awareness errors, 15.2% had Communication/Teamwork errors, and 5.4% had Leadership errors. Patient age, Hospital type, and Admission status were identified as statistically significant predictors. A significant decrease in overall nontechnical errors was demonstrated over the study period with periods of significant decrease for Communication/Teamwork and Leadership errors. No decrease in Decision Making and Situational Awareness errors were demonstrated. Conclusion: This study provides the first quantitative evidence of the incidence and characteristics of fatal non-technical errors in Australia. National non-technical skill priorities have been identified, providing targets for future improvement. ANZASM is the only mandatory, national, non-technical skill improvement activity in Australia, therefore, the significant reduction in non-technical errors are likely attributable to ANZASM processes.

11:40 am

<u>'A broken system': unaccredited registrars' perceptions and experiences of RACS training selection.</u> <u>Ben O'Gorman</u>

Purpose: To explore unaccredited surgical registrars' (USR) perceptions and experiences of RACS training selection. The analysis builds on previously reported quantitative analysis of survey responses (1) for a deep understanding of concerns about selection and to identify actions to improve experiences of USRs in RACS training selection. Method: An online anonymous 21 item questionnaire, developed with USR input, was distributed via social media USR networks, open for 6 months in 2023. Framework analysis of free text responses was used as a structured approach to identify themes on which to base policy and process change recommendations. Analysis was undertaken by BO and JM. Initial steps (data familiarization, coding, indexing, charting) to develop a draft framework were conducted independently. An iterative process developed consensus on the final framework. Subsequent joint mapping and interpretation explored the data for patterns related to respondent characteristics such as speciality, gender or PGY. Results: 79 respondents completed the survey. 44 provided comments, with 47% female. The final framework identifies three principal themes: system issues, personal stressors, culture. Sub-themes identify specific issues to be addressed to improve USR experience e.g support, supervision, cost. Cultural concerns were more common for females. Conclusion: USRs regard the RACS training selection process as a 'broken system'. Changes to RACS policy and process may improve their experiences however whole-of-system factors are also contributing. 1. Dowling, Caroline; Martin, Jenepher; Schembi, Emily; Sengupta, Shomik. Unaccredited speciality surgical training: the impact of the 'pre-SET' years. ANZJS Suppl SE002 May 2024.

11:48 am

<u>Old dogs and new tricks; utilising ChatGPT as a revision resource for the Generic Surgical Sciences</u> <u>Examination</u>

<u>Toby Ball</u>

Background: The Generic Surgical Sciences Examination (GSSE) is the post-graduate examination required for surgical training across Australia and New Zealand. With the ability to comprehend information provided by the user, language learning models, such as Chat-GPT, are increasingly being used as learning tools. This study investigated Chat-GPT's ability to produce revision materials for the GSSE, and how these materials stand up to practice questions in terms of accuracy and breadth of information. Methods: Commonly recommended textbooks were provided to Chat-GPT 40 as a source material. The prompt "provide revision material from the source material for (topic) here" was used, and topics were based on a commonly used practice question bank resource. If the material provided was insufficient to answer the question with no prior knowledge, a second prompt "provide more details from the source material for this topic" was used. 100 questions were answered in anatomy, physiology and pathology sections respectively. Results: 69% of questions were answered correctly only using information from the initial prompt, raising to 72% after the second. 1% of questions answered were incorrect. Physiology was the highest scoring section (78%) followed by anatomy (71%) and pathology (58%). Based on the pass mark for October 2022, answering questions only using these responses would be sufficient to pass all sections. Conclusions: Chat-GPT 40 provides rapid responses to prompts for revision material in an easy-to-read format. Despite some visual limitations, it appears to provide succinct and accurate revision notes from a reputable source and would be a valuable revision tool used alongside classic revision materials.

11:56 am

Navigating communication channels and increasing comfort with uncertainty: A qualitative interview study about learning and teaching decision-making in surgery Fardowsa Mohamed

12:01 pm

Becoming A Surgeon: A Resident, SET Registrar and Consultant Perspective Thomas Neerhut

Introduction/Ain

Introduction/Aim The Royal Australasian College of Surgeons (RACS) has defined ten core competencies facilitating progression through Surgical Education and Training (SET). RACS have also provided the JDocs Framework, A Guide To SET, the Professional Skills Curriculum and numerous other excellent recourses. While useful, an all-encompassing definition of the 'good' surgical registrar remains partly a hidden curriculum. This study, utilising broad perspectives aims to highlight the diverse attributes SET trainees should seek to develop. It is hoped our findings may add to any pre-existing SET educational and assessment frameworks. Methods A qualitative research approach was utilized employing reflexive thematic analysis. Using semi-structured interviews, 30 participants were interviewed comprising 10 surgical residents, SET surgical registrars and surgical consultants respectively. 12 participants identified as female and 18 male. All surgical specialities were represented. Results: Major themes included: a shepherd to guide the team, happy resident happy registrar, a decisive delegator, a deep sense of purpose and honesty at all times. While residents placed emphasis on the registrars ability to teach, guide and support the team, SET registrars prioritised the importance of a strong motivation to learn and the ability to delegate well. Consultants' perspectives primarily focused on the essential role of honesty and humility aswell as the importance of finding purpose in their work. Conclusion: Our results have illustrated a wide set of ideals all surgical trainees should strive for, many of which correlate to the RACS core competencies. Our findings may be developed into the RACS SET curriculum utilising validated novel educational frameworks.

12:06 pm

Inaugural Australian urology bootcamp for early-career medical officers: improving knowledge, skills, and confidence in preparation for their registrar years

Zoe Williams

Purpose Surgical 'bootcamps' support trainee development in risk-free environments. We developed an inaugural Australian urology bootcamp at Nepean Hospital covering technical and non-technical skills relevant to urological training. This study examines the benefits of this bespoke bootcamp in developing knowledge, skills, and confidence of junior doctors in preparation for their registrar years. Methodology Twenty-five junior doctor attendees completed a survey before and after the bootcamp. The survey examined personal perceptions of knowledge, confidence, and technical skills in performing emergency urological procedures, endoscopy, laparoscopy, and robotic surgery, as well as knowledge and confidence in the non-technical domains of research skills, interview technique, examination technique, and resilience in surgical training. Results The bootcamp improved self-perceptions of knowledge, confidence, and technical skill in all technical and non-technical domains (p<0.0002). There was a greater improvement in confidence in technical skills than non-technical skills (p=0.01). All participants reported the bootcamp to be 'useful' or 'very useful' in furthering their urological training. There was no significant difference in improvement of knowledge, confidence, or technical skill according to clinical experience level. The nonclinical setting was a positive contributor to participant learning. Conclusion This study demonstrates the success of an inaugural Australian urology bootcamp in preparing early-career medical officers for urological training. The positive response will promote the ongoing provision of this bootcamp in future years and provide a standard from which other Australian surgical bootcamps are developed.

12:11 pm

Which large language model performs best in the Generic Surgical Sciences Examination? Asanka Wijetunga

Purpose Large Language Models (LLMs) like OpenAI's ChatGPT, Google's Gemini, and Anthropic's Claude are being explored as tools in surgical decision-making. Since LLMs process information through neural networks, their performance in medicine can be assessed similarly to humans – with examinations. This study evaluates LLMs' performance in the RACS Generic Surgical Sciences Examination (GSSE), a mandatory hurdle for Australian surgical trainees. Methodology ChatGPT 4.0, Gemini 2.0, and Claude Sonnet 3.5 were tested against 650 questions from a public GSSE question bank, weighted per RACS guidelines. A component and overall score >65% were required to pass. A 100,000-iteration Monte Carlo simulation calculated failure probabilities, and mean, maximum, and minimum scores. Results Claude performed best, averaging 84.8% with a 0.1% failure probability. Gemini averaged 84.1% with a 0.2% failure rate, while ChatGPT scored 78.5% on average, failing 1.7% of the time. Claude excelled in anatomy (76.4%), outperforming Gemini (72.6%) and ChatGPT (67.3%). In physiology, Gemini led with 88.9%, followed by Claude (85.6%) and ChatGPT (75.8%). Pathology scores were similar for Claude (90.0%) and Gemini (91.4%), both surpassing ChatGPT's 82.9%. Differences were not statistically significant on t-testing. Conclusions Claude performed most consistently, but all three LLMs showed strong potential as decision-making tools in surgery. Further validation in advanced postgraduate and Fellowship-level exams is needed to confirm their utility in surgical practice.

12:16 pm

<u>Selecting for Success: Variations in Australian Surgical Training Selection Criteria</u> <u>Shravankrishna Ananthapadmanabhan</u>

Purpose In Australia, surgical selection is governed by the Royal Australasian College of Surgeon (RACS) and the Specialty Training Committees of each discipline. The aim of this paper is to critically review and compare the various selection criteria for surgical training programs in Australia, exploring their strengths, limitations, and potential implications of observed variations. Methodology Two authors accessed the publicly available selection criteria on official college websites for the nine surgical subspecialties governed by RACS in November 2024. Data was collected on individual components involved in selection and categorised as 1) minimum eligibility requirements, 2) Curriculum Vitae, 3) knowledge or aptitude tests, 4) referee reports, 5) interview. Results CV scoring commonly considered academic qualifications, research, clinical experience, rural exposure, attendance at courses, and extra-curricular achievement, with the weighting of each domain varying by sub-specialty. Scoring of examinations were considered by 3 out of the 9 RACS sub-specialty selection criteria. All sub-specialties required referee reports, either proforma-based or as structured interviews. 3 sub-specialties required referees from allied health professionals. Often stationbased, limited information was available on the content of candidate interviews, though, 7 of the 9 subspecialties weighted interviews as the greatest component of selection. Conclusion The Australian surgical training system demonstrates significant variation in selection criteria across specialties. While common elements exist, further research is needed to identify which selection methods and criteria most effectively evaluate and select suitable surgical candidates.

05 May 2025

12:30 pm - 1:30 pm ASC 2025 ORGANISING COMMITTEE DEBRIEF MEETING

Business Meeting - ***Cross Discipline*** - Meeting Room C3.3

12:30 pm - 1:30 pm LUNCH - MONDAY

Catering - <u>*Cross Discipline*</u> - Hall 5

05 May 2025

12:45 pm - 1:15 pm Medtronic Lunch Session: Technique, Technology and Training: A Hybrid Approach to Robotic-assisted Anastomosis (RAA)

Scientific Session - <u>*Cross Discipline*</u> - Meeting Room C4.9 - Meeting Room C4.10

05 May 2025

1:30 pm - 3:30 pm PLENARY SESSION - WELLNESS: SURGICAL ERGONOMICS, SURGEONS AS PATIENTS

Plenary Session - ***Cross Discipline*** - Darling Harbour Theatre

1:30 pm <u>Wife and Death</u> <u>Dr Glaucomflecken (Will Flanary)</u>

2:00 pm Ergonomics in surgery: Why we hurt and what we can do about it Raewyn Campbell

2:15 pm Declutter your career to spark more joy! James Lee

2:30 pm

<u>At the Cutting Edge: What drives surgical innovators?</u> <u>Miriam Wiersma</u>

Purpose: Clinical innovation—where doctors develop and use novel interventions that differ from standard practice and that have not been shown to be safe or effective—has the potential to transform patient care and advance medical practice. However, it is not without risk. To encourage responsible clinical innovation, healthcare institutions need to understand what drives and deters doctors from developing and using innovative interventions. While existing research has provided valuable insights into contextual factors (e.g. resource constraints), less attention has been paid to individual factors (e.g. individual traits). Methodology: The aim of this qualitative study was to investigate the factors that drive and deter clinical innovation across diverse medical specialties. Thirty-one semi-structured interviews were conducted with Australian surgeons, fertility specialists and cancer care physicians. Results: We found that a combination of individual traits (e.g. curiosity), interests (e.g. obligations to patients, and financial concerns) and contextual factors were perceived to converge and synergistically influence doctors' use of innovative interventions. Conclusion: Our findings suggest that while addressing structural barriers to clinical innovation at the health system level remains important, attention must also be given to the interests of physician-innovators and other stakeholders including patients, healthcare institutions, and industry. Understanding these interests, the complex ways in which they align and conflict, and the ways in which they intersect with contextual factors and individual traits will enable healthcare institutions to encourage physician-led innovation and ensure that it is responsible.

2:45 pm

Humanising Surgery: Lessons from Aviation Human Factors for Surgeon Wellbeing Chris Lin

3:00 pm Discussion

3:25 pm RACS ASC 2026 Ming Yew 05 May 2025

3:30 pm - 4:00 pm AFTERNOON TEA - MONDAY

Catering - <u>*Cross Discipline*</u> - Hall 5

05 May 2025

4:00 pm - 5:30 pm EXCELLING AS A YOUNGER FELLOW

Scientific Session - Global Health, Younger Fellows - Meeting Room C4.1

4:00 pm

From Learner to Leader: Junior Faculty as the Key to Generational Connection Jessica Fazendin, Jessica Fazendin

4:20 pm

Leadership in Global Health as a Younger Fellow Ruth Mitchell

4:40 pm <u>Doing Good Right: Managing the Risks of Humanitarian Surgery</u> <u>Rowan Gillies</u>

5:00 pm

<u>Commitment in Chaos: The Art of Advocacy When You're Out of Time, Energy, and Sanity</u> <u>Kelvin Kong AM</u>

In a world that demands constant action and unwavering dedication, how do we stay committed to advocacy when we're stretched thin, overwhelmed, and running on empty? Commitment in Chaos: The Art of Advocacy When You're Out of Time, Energy, and Sanity explores the messy, imperfect, and often hilarious reality of fighting for change while juggling life's endless demands. This talk shares strategies for sustaining advocacy efforts—even when you're too busy to breathe—and celebrates the success of joined efforts. Whether you're an activist, ally, or just someone trying to make a difference, this session will hopefully remind you that advocacy isn't about perfection—it's about persistence.

5:20 pm Discussion

4:00 pm - 5:30 pm Financial sustainability and controversies in private healthcare

Scientific Session - <u>Trainees Association</u>, <u>Health Policy & Advocacy</u> - Meeting Room C4.6 - Meeting Room C4.7

4:00 pm <u>Panel Discussion - Financial sustainability and controversies in private healthcare</u> <u>Kylie Woolcock, Rachel David, Nick Coatsworth, William Blake, Sue Williams</u> Scientific Session - <u>Surgical History</u>, <u>Surgical Education</u>, <u>Trainees Association</u>, <u>Women in Surgery</u> - Meeting Room C4.10 - Meeting Room C4.9

4:00 pm <u>History of women into surgical training and fellowship</u> <u>John Collins</u>

4:20 pm Myth of Meritocracy and surgical selection Upeksha De Silva

4:40 pm <u>Gender bias in training assessments</u> Ian Incoll

Surgical training programs are evolving towards competency-based training, which relies on an increased frequency and type of assessment to make informed training, progression and certification decisions. Any assessment system is vulnerable to bias from many sources, so it is important that these biases be explored, documented and minimised wherever possible. This presentation focuses on the sources of assessment bias in the Australian surgical training environment, using examples from data available from the specialty training organisations associated with RACS, including the AOA 21 orthopaedic training evaluation. Suggestions for mitigating and reducing these biases will also be discussed.

5:00 pm

<u>Pipeline to Practice: Building a Diverse Surgical Workforce</u> <u>Christine Lai</u>

5:20 pm Discussion

4:00 pm - 5:30 pm IMPROVING HERNIA SURGERY TRAINING - FROM SET TRAINING AND BEYOND

Scientific Session - <u>Trainees Association</u>, <u>Hernia Surgery</u>, <u>General Surgery</u>, <u>Rural Surgery</u>, <u>Surgical Education</u> -Meeting Room C4.8

4:00 pm

<u>Hernia Surgery – from an Old Operation to Cutting-Edge Surgery – What are the skill set our Trainers need</u> to teach Hernia Surgery

Anita Jacombs

Introduction to modern educational resources for the training General Surgeons, trainees and Fellows the techniques and art of abdominal wall hernia surgery and abdominal wall reconstruction.

4:10 pm

<u>GSA – Developing a Hernia Curriculum that will Provide Trainees with the requisite Hernia Surgery</u> <u>Knowledge and Skills</u>

<u>Kellee Slater</u>

4:25 pm

ANZ Hernia - Educational Innovation, Collaboration and Ensuring the Next Generation of Hernia Surgeons are Well Trained Hugh McGregor

4:40 pm

Myopectioneal Orifice & Redefining Gold Standard Inguinal Hernia Repair Groin Surgery Alex Karatassas

Significant innovations in surgical techniques and prosthetic materials have led to a reduction in early recurrence rates. The continued use of recurrence as the sole key performance indicator of surgical success, at the expense of ignoring patients' outcomes, aligns poorly with evidence-based medicine in the modern age. The introduction of hernia-specific patient-reported outcome measures (PROM) and patient-reported

experience measures (PREM) revealed significant post-operative chronic groin pain (POCGP) and reduction in quality of life (QoL) after seemingly' simple' inguinal hernia surgeries. The perception that inguinal hernia repairs are simple, and can be offered to all without due consideration should no longer be acceptable. Inguinal hernias, as a disease entity, are complex, and a universal solution for all scenarios is likely not possible. Surgeons who manage inguinal hernias should be proficient in a variety of operative approaches (open, laparoscopy or robotic-assisted). In both open and MIS surgery must teach importance of identifying or knowing position of nerves and leaving fascial coverings around nerve to reduce risk neuralgia. The gold standard technique in inguinal hernia repair is no longer about reducing recurrence but instead a more technical focused approach in avoiding nerve injury and in ensuring appropriate mesh placement according to mesh science principles to prevent chronic inflammation around the mesh and hence pain. For a posterior approach this involves understanding the MPO its microfascial anatomy including the 5 triangles, 3 zones, 2 compartments and 9-10 rules for obtaining the critical view of the MPO.

4:50 pm

Training the Robotic Hernia Surgeons of the Future David Wardill

5:00 pm

Developing a Hernia Fellowship Programme for Australia-Aorteaora-New Zealand Rodney Jacobs

High volume surgeons and high-volume centres of excellence have been shown to improve outcomes, lower mortality and reduce health care costs. The same is true for hernia surgery. There has been an in evolution in abdominal wall reconstruction, with major advances in understanding pathophysiology, hernia prevention, pre-operative and post-operative management and surgical technique. General surgical trainees in Australia and New Zealand have limited exposure to the treatment of complex abdominal wall pathology and as a result outcomes for repair are suboptimal. Dedicated training programs for abdominal wall surgery are established in Europe and the United States, they produce surgeons who have appropriate expertise in the modern management of hernias. They encompass pre, peri and post-operative management, excellence in surgical technique, a focus on quality control and research. These advanced hernia programs are carried out in accredited centres of excellence, which are high volume, follow internationally recognised guidelines for treatment performed by experienced, specialist hernia surgeons. They invariably have robust quality control monitoring, documentation of outcomes and access to multidisciplinary services. Under the auspices of ANZHS, it is proposed to set up an advanced training (post fellowship) program within Australia and New Zealand. Training will occur, in a select number of centres that satisfy strict inclusion criteria.

5:10 pm Discussion

4:00 pm - 5:30 pm RESEARCH PAPERS

Scientific Session - Rural Surgery - Meeting Room C4.2

4:00 pm

Investigating postcode lottery: Do regional outreach clinics improve access to elective general surgical care for Rural and Māori populations? Sarah Cowan

4:08 pm

Burns Injury Characteristic and Outcomes at Lautoka Hospital, Fiji Rahul Reddy

Background Burns injury are a global public health problem and one of the leading causes of morbidity and mortality. However, there is no published literature available from Lautoka Hospital in Fiji that assessed the characteristics and outcomes of burn patients. Objective The aim of this study was to explore sociodemographic and clinical characteristics, medical care and outcomes of burn injury patient at Lautoka Hospital in order to gain deeper insights into burns related issues and improve burns care at the hospital. Method A retrospective cross-sectional study was conducted between January 1st 2020 and June 30th 2024 at Lautoka Hospital in Fiji. Data were analyzed using SPSS version 25. Results Study population included 267 patients predominately male (570%). Majority of the patients (590%) were aged below 100years. Most of the

burns occurred at home (920%). A significant proportion of patients (640%) had burns affecting multiple regions with the lower extremities being the most commonly affected area. Partial thickness burns were observed in 87.50% of patients. The majority of patients (550%) had a total body surface area (TBSA)0<000% affected by burns. Normal saline (390%) and Paracetamol (930%) were most commonly used intravenous fluid and analgesic respectively. Most patients (93.50%) underwent daily hydrotherapy while 260% required surgical interventions. The median length of hospitalization was 7.40 days. Wound infection occurred in 250% of patients and the mortality rate was 100%. Conclusion This study provides deeper insights into burn related issues in order to reduce the incidence and morbidity of burn injury, and improve care. A multicentered prospective study is recommended.

4:16 pm

<u>Complicated diverticular disease and primary anastomosis; A Retrospective Case Series</u> <u>Devlin Elliott</u>

Purpose: Hartman's procedure is the gold standard for treating complicated diverticular disease. This is meant to reduce the risk of septic complications such as anastomotic leak. However, a significant number of patients are not being reversed and this delayed approach may be unnecessary. The objective of any colorectal disease is to remove pathology and re-establish normal anatomy. We aim to illustrate that primary anastomosis with or without loop ileostomy is a valid alternative. Methodology: Retrospective review of 31 complicated diverticular disease patient's medical records, who underwent surgery at Rockhampton Hospital from 2013 to 2018. HBCIS database along with ICD10 coding was used. Inclusion criteria was anyone who had a Hartman's, primary anastomosis with or without loop ileostomy. Primary endpoint was anastomotic leak, secondary endpoints included other complications such as abscess or fistula. Results: 16 primary anastomosis patients, 7 Hartman's, 8 primary anastomosis plus loop ileostomy. 1/16 had an anastomotic leak, nil in the other groups. 2/16 had adhesion related obstruction, requiring surgical adhesiolysis. Average length of stay for primary anastomosis was 7.4 days, Hartman's 14.9, loop ileostomy 13.8. 3/7 Hartman's had secondary complications of abscess or wound breakdown with 2/7 being reversed (average 16 months). 2/8 loop ileostomy had superficial/deep wound dehiscence, 6/7 reversed (average 6.4 months). Conclusion: Primary anastomosis with or without loop ileostomy in the setting of complicated diverticular disease is a valid and safe alternative to Hartman's procedure. These procedures have a favourable risk profile, can be single stage or easily reversible. Larger randomised controlled trails are required.

4:24 pm

<u>Cost effectiveness of a multidisciplinary perioperative protocol for high-risk emergency major abdominal</u> <u>surgery.</u>

<u>Jason Cox</u>

Background The Australian and New Zealand Emergency Laparotomy Audit (ANZELA) perioperative protocol was implemented as standard-of-care for Emergency Major Abdominal Surgery (EMAS) at Bendigo Health in September 2021. ANZELA recommends all EMAS patients undergo routine preoperative risk assessment (RPRA) with the 'National Emergency Laparotomy Audit (NELA) Calculator.' Patients with NELA perioperative mortality estimates ≥10% are considered 'high risk' and routinely referred to the critical care unit (CCU) for planned postoperative admission. This study aims to identify whether RPRA and routine CCU referral for high risk EMAS patients are cost-effective interventions. Methods A retrospective audit was conducted including high-risk adult patients who underwent EMAS at Bendigo Health between September 2017 and August 2023. Postoperative outcomes and costs were compared before and after the implementation of the ANZELA perioperative protocol. A cost-effectiveness analysis was subsequently conducted to estimate the additional cost per improvement in outcome, presented as incremental cost effectiveness ratios. Results 191 high risk EMAS patients were identified. The mean postoperative cost of care was AUD\$52,338.78, with no significant change post-ANZELA (p=0.98). Post-ANZELA, there was a 15.3% reduction in rate of planned CCU admissions (p=0.026), 10.9% reduction in rate of unplanned returns to theatre (p=0.045), and 16.8% reduction in rate of severe postoperative complications (p=0.03). There was no significant change in postoperative mortality (p=0.59). Conclusion The ANZELA perioperative protocol for high-risk EMAS improves perioperative outcomes without increasing costs. The protocol is therefore costeffective.

4:32 pm

<u>Retrospective Analysis of Early Antibiotic Administration with Clindamycin or Trimethoprim-</u> <u>Sulfamethoxazole for Soft Tissue Infections Requiring Surgical Intervention in the Northern Territory</u> <u>Kugendran Ponniah</u>

Emily Sawyer

Purpose Access to laparoscopic cholecystectomy is more limited for remote communities and Indigenous patients internationally. To date, studies exploring the incidence of gallstone disease and access to LC in Australian regional communities are limited. This study examined the rates and outcomes of emergency laparoscopic cholecystectomy (EMLC) in Far North Queensland (FNQ), specifically in Indigenous and remote populations. Methodology We retrospectively examined all patients who underwent an EMLC at Cairns Hospital between 2016-2021. Results Over the study period, 634 EMLCs were undertaken. The average annual rate of EMLC was 56 cases per 100,000. However, rates of EMLC were significantly higher in remote communities and Indigenous patients compared to the remaining cohort. Indigenous and remote patients also had a longer hospital length of stay and more comorbidities. Patients from remote communities were more likely to have pre-existing gallstone disease but were less likely to have been seen in a surgical outpatient clinic prior to admission. Despite this, surgical outcomes for EMLC were comparable to national and international standards. Conclusion This study highlights the challenges in surgical healthcare provision for gallstone disease in a regional centre. The requirement for EMLC disproportionately effects geographically isolated communities and Australian Indigenous people. Addressing the healthcare barriers to management of GD in regional Australia should be a priority.

4:48 pm

Epidemiological patterns of subdural haematoma in the Top End Charlie Cho

Purpose With the rising incidence of subdural haematomas (SDH), understanding its local epidemiological patterns is crucial for targeted prevention and healthcare preparedness. This retrospective single-centre audit examined these patterns in the Northern Territory where cultural, social, and geographic challenges add complexity. Methodology Patients with convexity SDH admitted to Royal Darwin Hospital between June 2014 and May 2020 were identified. Clinical data was extracted from medical records and 2016 Census data from the Australian Bureau of Statistics were used to estimate local incidence. Results A total of 247 patients were admitted with convexity SDH (70% male, 43% Indigenous), with 108 requiring surgery. Surgical intervention was required in 73 of 192 acute and 35 of 55 chronic SDH cases. Total incidence was 23.4 (95% CI: 17.3-31.7) per 100,000 persons per year (PPY), and for Indigenous and non-Indigenous populations were 43.9 (95% CI: 27.7-69.7) and 16.9 (95% CI: 11.26-25.4) per 100,000 PPY respectively. Mean age at presentation was 47 years for Indigenous and 66 years for non-Indigenous patients. The average distance to the hospital was 25.9km requiring 1.47hours of travel. Assault was the leading cause of acute subdural haematomas in the Indigenous population (39.6%), while falls were most common in non-Indigenous (52.5%). Alcohol intoxication was noted in 93 cases, predominantly in acute SDH (85 cases). Conclusion Reviewing the local epidemiological patterns of SDH in the Northern Territory highlights the disparities in incidence, age and causes of SDH between Indigenous and non-indigenous populations, emphasising the need for targeted prevention and management strategies.

4:56 pm

<u>General subspeciality fellowship access across regional and rural Australia</u> <u>Frank Dunley</u>

Formal subspeciality training programs are seen to be required to be able to achieve competence in subspecialty surgery (1) including across regional and rural areas which have less exposure to subspeciality presentations, surgeries and training. Regional and rural subspecialty surgery access is lacking in comparison to metropolitan areas, with geographical and financial barriers to healthcare. Extensive research has been undertaken assessing the factors that improve regional and rural doctor retention, with many factors being able to support doctors in the rural positions (2). We reviewed post general surgery FRACS fellowship position offerings across the country via their open access websites. We reviewed the positions across the country assessing their Modified Monash Model (MMM) rurality. Fellowship training positions across general surgical specialities showed that majority of the positions are in a Modified Monash Model area 1 - metropolitan areas. While subspeciality training cannot be solely undertaken in regional and rural areas given the requirement for increased caseload, regional hubs may offer an opportunity for partial or full subspeciality training which may improve regional and rural subspeciality surgery access. 1/ Lian T, Leong DC, Vikneson K, Wong J, Sywak M, Papachristos A, Glover A. Endocrine surgery fellowship is necessary for competent endocrine surgical practice: perspectives from Australia and New Zealand. ANZ Journal of Surgery. 2024 Oct 16. 2/ Kumar S, Clancy B. Retention of physicians and surgeons in rural areas what works?. Journal of Public Health. 2021 Dec;43(4):e689-700.

5:04 pm

Building a rural surgical workforce through rural training posts: evaluation of current rural training available to RACS trainees Elysia Jongue

INTRODUCTION Rural communities remain under-serviced by surgeons. Positive rural exposure for trainees is strongly associated with increased rural recruitment and long-term retention. Several Australian speciality training programs, including RACS specialities, have implemented rural training initiatives to support the rural workforce and develop trainees' exposure to rural surgery. This study compares the rural surgical training currently available to RACS Surgical Education and Training (SET) trainees across surgical specialties. METHODOLOGY An online-based search was performed to identify accredited rural training posts in 2025 for all RACS SET surgical specialities in Australia. The rural training posts for each speciality selection was reviewed and analysed. RESULTS 8 of 9 RACS specialities offer a rural training post. General and Orthopaedic surgery offer rural training posts (up to MM6) across 6 states and 1 territory. Otolaryngology and Urological surgery offer rural training in 4 states, with Neurosurgery, Plastic and Vascular surgery offering posts in 3 states. Paediatric surgery offers a rural training post (MM2) in 1 state available for early and mid SET training. Cardiothoracic does not currently offer a rural training post. The maximum duration of training able to be completed in a rural location varies between location and surgical speciality. CONCLUSION RACS is contributing to developing a future sustainable rural surgeon workforce through accredited rural training posts where most RACS surgical specialities offer a rural/remote rotation. Continued development of rural training posts should continue to provide rural surgical skills and ensure the requirements of rural Australian surgical healthcare is met.

5:12 pm

<u>The unique approach for the closure of tracheostomy sites in Northern Queensland</u> <u>Sheramya Vigneswaran</u>

Background: Tracheostomy closure often requires surgical techniques to address functional and aesthetic concerns. Various plastic surgery methods, including Z-plasty, rotational flaps, advancement flaps, and free tissue transfer, are described in the literature for closure of these wounds. However, in rural settings, limited resources, staffing, and access to specialized surgical tools are difficult making a simpler and more resource-efficient strategy desirable. We describe in detail a unique simplified approach to achieve similar results with a less invasive technique. Method: Simple skin circular incision of tracheostomy site to allow for a tension- free double layer primary closure. [Clinical photographs of defect and reconstruction steps to be included] Results: The technique was successful in two patients both in function and aesthetic outcome. Conclusions: To our knowledge these are the first reported cases where tracheostomy sites have been closed with this approach. The use of this approach minimises surgical time, resource utilization, and morbidity. This case series emphasizes the importance of tailoring surgical strategies to individual patient needs, avoiding unnecessary complex procedures, and ensuring cost-effective care.

4:00 pm - 5:30 pm RESEARCH PAPERS

Scientific Session - Hernia Surgery, General Surgery - Meeting Room C4.5

4:00 pm

<u>Prophylactic Suction Drainage for Oesophageal Anastomosis using the Freka Nasojejunal Tube Compared</u> to Free Drainage on Development of Anastomotic Leaks <u>Ryan Teh</u>

Purpose To determine if prophylactic suction using a Freka nasojejunal tube, after oesophagectomy and gastrectomy, reduces incidence of anastomotic leaks. Methods We performed a retrospective observational cohort study on patients who underwent oesophagectomy and gastrectomy with primary anastomosis between 2012 to 2023, across two major tertiary centres. Prophylactic suction was applied at 5kpa. Data collected include patient demographics, background medical history, operative outcomes, severity and timing of anastomotic leaks. Results were analysed using SPSS v25.0 (SPSS, IBM Corp, Armonk, NY). Results 354 patients underwent oesophageal anastomosis with Freka insertion, majority (65.3%) underwent 2-stage oesophagectomies, 24.9% gastrectomies, and 9.9% 3-stage oesophagectomies. Average age was 64.4±10.0 years, with majority (83.3%) male. 61.9% received prophylactic suction. Incidence of leaks was 10.2%, with majority (52.8%) being grade 2. Prophylactic suction was associated with reduced incidence of leaks, although not statistically significant. Use of prophylactic suction was significantly associated with reduced ICU and overall length of stay (LoS). The occurrence of leaks is associated with morbidities of atrial fibrillation and pneumonia, increased 30-day mortality, as well as increased LoS. Risk factors in our cohort for increased leaks include smoking, previous IHD, higher post-operative white cell count (WCC) and longer operation time. After adjusting for prophylactic suction, smoking, IHD and prolonged operation times were no longer statistically significant. Conclusion Prophylactic suction may reduce post-operative anastomotic leaks in high-risk patients with prolonged operative times, IHD and a smoking history.

4:10 pm

Assessing Adherence to ACPGBI Guidelines for Acute Diverticulitis Follow-Up: A Trust-wide Evaluation Mohamed Abosheisha

Background Acute diverticulitis (AD) is a common surgical condition classified as complicated or uncomplicated based on the severity of inflammation. Imaging findings, such as colonic wall thickening, may mimic or conceal malignancy. The incidence of colonic neoplasia is higher in complicated AD (7.8%-10.9%), making interval colonoscopy mandatory following complicated cases. The Association of Coloproctology of Great Britain and Ireland (ACPGBI) provides guidelines to standardize follow-up practices. Aim To evaluate adherence to ACPGBI guidelines for follow-up of conservatively managed AD within Cwm Taf Morgannwg University Health Board (CTM UHB). Methods The first audit cycle reviewed AD admissions at Princess of Wales Hospital (POWH) over 18 months to assess guideline adherence. Interventions included introducing a local management pathway, educational posters, and teaching sessions. A second cycle included data from POWH and Prince Charles Hospital (PCH) and was reviewed at a Trust Audit Meeting. Results In the first cycle at POWH, 55.6% of complicated AD cases had follow-up endoscopy, while 60% of uncomplicated cases underwent unnecessary endoscopy. The second cycle showed improvement: at POWH, follow-up for complicated AD increased to 62.5%, unnecessary endoscopies dropped to 27.3%, and malignancy follow-up remained 100%. At PCH, 57.1% of complicated cases had follow-up, but 66.7% of uncomplicated cases received unnecessary endoscopy. Conclusion Adherence to ACPGBI guidelines improved but varied across sites. Efforts should focus on reducing unnecessary investigations while ensuring proper follow-up for complicated and malignant cases.

4:20 pm

When the bladder takes a detour: A systematic review of inguinal bladder hernia David Kadamani

Background Inguinal hernia of the bladder (IBH) is an uncommon clinical condition. It is typically diagnosed intraoperatively which prolongs operative time and increases risk of complications. Methods A literature review adhering to PRISMA guidelines was conducted across PubMed, SCOPUS, Medline, and Embase databases. Two independent reviewers searched the terms "inguinal bladder hernia," "bladder hernia," and "inguinoscrotal hernia." English-language case reports and case series from 2000–2024 involving adults (\geq 18 years) were included. Data on demographics, presentations, diagnostics, management, and outcomes were analysed independently by two authors. Results One hundred cases of IBH were identified, predominantly in males with a mean age of 69.5 ± 12.7 years. Common presentations included inguinal swelling (58%), lower urinary tract symptoms (52%), and double micturition (15%). Approximately two fifth of the population were obese. CT (75%) and X-ray (43%) were key diagnostic tools. Operative repair was 86% open and 14% laparoscopic with mesh used in most cases. The post-operative complication rate was 6.8% with a recurrence of 4.4%. The mortality rate was 3.1% largely attributed to underlying comorbidities. Conclusion Preoperative diagnosis of IBH is uncommon due to its rarity and nonspecific symptoms in the early stages. Awareness of epidemiological and clinical patterns can help facilitate preoperative diagnosis to optimise surgical planning and patient outcomes.

4:30 pm

<u>Factors in Affecting Overnight Admissions for Patients Designated for Day-Only Laparoscopic</u> <u>Cholecystectomy in a High-Volume Center</u> <u>Odette Pheiffer</u>

Purpose This study aimed to evaluate factors contributing to unplanned admissions in patients scheduled for day-only laparoscopic cholecystectomy (DOLC) in a high-volume ASC. Methodology Retrospective analysis of 664 DOLC patients (2021–2024). Key quality measures included perioperative hypothermia, analgesia efficacy, PACU monitoring, Clavien-Dindo complications and adherence to ERAS protocols. Hypothermia, readmission, and transfer rates were assessed against U.S. ASC quality benchmarks. Results 116/664 patients (17.5%) had failed DOLC. Factors associated with admission included age >60 yrs (p=0.007). higher intraoperative opioid doses (p=0.047) and higher total PACU opioid doses (p<0.0001). Univariate analysis found younger age (mean 45.7 vs. 49.4 yrs,p=0.024), lower BMI (30.17 vs. 31.90,p=0.014), TAP block (p<0.0001), shorter surgical times (64.78 vs. 75.33 mins,p<0.0001) increased successful DOLC. MVA confirmed age, BMI and surgical duration as significant independent predictors of failed DOLC. Common reasons for unplanned admission included postoperative pain (14.6%), intraoperative complications (12.9%), medical conditions (10%), late finishes (8.6%), nausea or vomiting (6%), intraoperative medical complications (5%), or abnormal IOC (4.3%). Abdominal drains were placed in 31.9% of cases. Additional factors included transport issues (0.86%) or lack of family support. Conclusions The nature of unplanned overnight admissions underscores the need for improvement in perioperative management. Standardized protocols focusing on patient selection, ERAS protocol adherence, and optimizing surgical and anaesthetic practices may reduce overnight stays, readmissions and transfers, enhancing patient care and performance of DOLC.

4:40 pm

Same-day abdominal wall and groin hernia surgery in adults: A model for improving public access to surgery

Pratik Raichurkar

Background: Benefits of same-day surgery for inguinal, femoral and umbilical hernia repair are well established, but same-day surgery is less commonly practiced than expected. There is a paucity of bestpractice models delivering such care for young and fit patients in the public Australian setting. This study aims to evaluate establishment of a short-stay service to increase access and efficiency of surgical care delivery for abdominal wall and groin herniae. Methodology: Prospective cohort study enrolling since Sep 2023 at Canterbury Hospital, a secondary hospital in NSW. Short-stay hernia service established following business case approval, creation of clinic, marketing and referral pathways. Suitable patients: uncomplicated hernia, age 18-75 years, BMI <40, and without major comorbiditiy. Patients underwent laparoscopic or open hernia repair with focus on minimally invasive approach and nerve blocks where possible. Aftercare arranged at 4 and 52 weeks post-operative. Outcome measures included failed same-day discharge rate, complications, and quality-of-life (EuraHS-QoL Scale). Results: 75 new referrals reviewed. 33 patients, with median age 45 years (IQR 31, 57), mean BMI 27 (SD 5.6), median ASA II (IQR 1, 2), underwent surgery. There were 20 laparoscopic inguinal, 1 open inguinal, 7 open umbilical, and 5 open ventral hernia repairs. Significant improvement in QOL post-operative, and only 2 failed same-day discharge. Conclusions: The short-stay hernia service strengthened referral networks for underserved young functional public patients. Early experience with establishment and performance of this service is positive. Hospital logistics, facilities, staffing, and financial incentives are key to the model's success.

4:50 pm

Minimization of Open Abdominal Surgical Site Infections with the Oxford SSI Bundle in a Regional Centre Fraser Simpson

5:00 pm

Impact of Pre-Operative Patient Transfer on Mortality Outcomes in Emergency Laparotomy: Insights from HNELHD

Gabrielle Francis

Purpose: This study examines the impact of pre-operative patient transfers between hospitals on 30-, 90-, and 365-day mortality for emergency laparotomy (EL) patients in the Hunter New England Local Health District (HNELHD). All hospitals were within one hour by road transport, yet transfers were frequent. Methodology: A retrospective cohort study analysed 1,320 adult EL cases from 2016–2019, divided into two 2year cohorts (2016/17 and 2018/19). Propensity-matching accounted for baseline risk factors unaffected by hospital pathways (e.g., age, sex, ASA classification). Data were compared against National Emergency Laparotomy Audit (NELA) benchmarks. Results: Pre-operative transfers occurred in 25.6% of cases, with rates decreasing from 28% in 2016/17 to 22.3% in 2018/19. Transferred patients had significantly higher 30-day mortality (17.5% vs. 10.2%) and 90-day mortality (24.3% vs. 15.8%) compared to non-transferred patients. However, 365-day mortality rates showed no significant difference. Conclusion: Pre-operative transfers for EL patients in HNELHD are linked to increased short-term mortality, reflecting mismatch of resources and patient's condition at the initial hospital. Many hospitals lack essential features, including 24/7 on-site operating theatre staff, interventional radiology, in-house intensive care, and imaging with on-site reporting. Additionally, insufficiently frequent consultant rostering hinders skills maintenance in gastrointestinal surgery. Addressing these deficiencies through improved facilities and robust on-call systems is crucial. Such changes will reduce transfer dependency. The alternative is a hospital bypass system for abdominal pain patients.

5:10 pm

Hartmann's reversal rates and reasons for non-reversal: a single-centre retrospective study. <u>Victoria Kollias</u>

Introduction: Hartmann's procedure is a commonly performed general surgical operation. Although potentially reversible, recent evidence on reversal rates in the Australian literature is limited. The purpose of this study was to evaluate the proportion of patients undergoing Hartmann's procedure that eventually proceed to reversal; and reasons for non-reversal. Methods: A single-centre retrospective study of all patients who underwent Hartmann's procedure between January 2018 and December 2022 was performed, with patient follow-up until the end of July 2024. Medical records were reviewed to obtain clinical, operative, pathological and postoperative course details. Results: Two hundred and eighty-two patients underwent Hartmann's procedure during the study period, of which 249 cases (88.3%) were performed in the emergency setting. The most common indications for Hartmann's procedure were complications of sigmoid diverticulitis (53.5%), followed by malignancy (26.6%). One hundred and eleven patients (39.4%) proceeded to

Hartmann's reversal, with a median time interval of 405.5 days between initial Hartmann's procedure and reversal (range 109-1392 days). Among the 171 patients who did not undergo reversal, 58 (33.9%) died during the follow-up period, including 22 (12.9%) with locally advanced or metastatic colorectal cancer. Thirty-four patients (19.9%) declined reversal. Conclusion: Hartmann's procedure is performed predominantly in the emergency setting. Approximately 40% of patients underwent Hartmann's reversal during the study period. Patient preference accounted for approximately 20% of non-reversal cases, which was an unexpected finding.

5:20 pm

Abdominal Wall Mesh Tissue Integration Index

Edward Young

Purpose Poor mesh tissue integration is thought to be responsible for hernia mesh repair failures years after surgery. The aim was to develop and validate a standardised abdominal wall mesh tissue integration index to facilitate research. Methodology The Index is a ratio scale defined pre-experiment to assess integration, fibrosis, adhesion and degradation behaviour of hernia mesh in vivo, using a series of standardised tools. The Index was validated by using a porcine model. Twelve brands of mesh were implanted into twelve Landrace-White pigs. Appropriate mesh were randomised to retrorectus and intraperitoneal space. Post-mortems with explantation of mesh-tissue complexes were performed at 2, 3, 4, 8 and 12 weeks. All explants were subjected to standardised testing as predefined in the Index. Results Multi-level linear regression analysis using maximum likelihood was performed. A strong fit of models was achieved for all four areas of the Index, with minimal residues. T-test was applied to contrasts using Satterthwaite's method. Integration was predicted by week 8 (p < 0.001) and beyond. Compared to polypropylene, no statistically significant difference in integration among meshes were observed, except for macroporous mesh (p = 0.011). Fibrosis was predicted by week 12 (p = 0.002), and infection (p = 0.002). Degradation was predicted by intraperitoneal mesh (p = 0.047). A reduction in adhesion was predicted by week 8 (p = 0.046) and 12 (p = 0.011). Conclusion The Index is a valid system at objectively grading mesh behaviour in the short-term. Longer-duration studies are needed to validate the Index further.

4:00 pm - 5:30 pm SURGICAL ONCOLOGY

Scientific Session - Surgical Oncology - Meeting Room C3.5 - Meeting Room C3.4

4:00 pm <u>The importance of leadership development in academic surgery</u> Callisia Clarke

4:20 pm <u>Q&A</u>

4:30 pm

Impact of early post-operative oral feeding in head and neck surgery involving microvascular free tissue transfer: a meta-analysis

Brandon He

Purpose: Early oral feed initiation following head and neck surgery involving microvascular reconstruction is a topic of significant debate. Historically, patients are kept "nil-by-mouth' for 6-12 days to minimise the risk of post-operative fistula formation. Conversely, recent studies spearheaded by Enhanced Recovery After Surgery programmes have shown early feeding to optimise physiological function, reduce stress response and facilitate recovery and healing. Nevertheless, the ideal timing for oral feeding is uncertain and its effects on post-operative complications and hospital length-of-stay (LOS) remains contentious. Methods: A systematic review of Medline, Embase, Cochrane, and Scopus was conducted for studies comparing outcomes and LOS of early vs delayed oral feeding following head and neck surgery involving microvascular free-tissue transfer. Within five post-operative days was defined as early feeding. Fixed and random effects meta-analyses were utilised. Results: Ten studies involving 1163 patients were included. There was a significantly lower risk of fistulas (4.1% vs 10.3%) (RR=0.46; 95% CI 0.26 to 0.81; P=0.008) and pneumonia (7.2% vs 12.1%) (RR=0.60; 95% CI 0.36 to 1.00; P=0.049) with early feeding. LOS was also shorter after early feeding (x=9.9 vs 13.1 days) (MD=-4.10, 95% CI -7.07 to -1.14; P=0.007). There was no significant difference in flap failure, haematoma or dehiscence. Conclusions: Starting oral feeding within five days is associated with better or similar outcomes and shorter LOS than later feeding. While further prospective trials targeted to the mucosal site and feed progression is required to provide more specific recommendations, surgeons should

4:40 pm

<u>Evaluating the safety profile of a novel two-stage technique for nephrectomy with caval thrombectomy in</u> <u>patients with level IV renal cell carcinoma</u> Daniel Crisafi

4:50 pm

Intra-Operative Radiotherapy (IORT) provides lower recurrence rates in the elderly patient cohort Elizabeth Tan

Purpose Intra-operative radiotherapy (IORT) is a promising alternative to Breast Conserving Surgery (BCS) with or without sentinel lymph node biopsy, and adjuvant external beam radiotherapy (EBRT). IORT is an intra-operative single radiation dose to the tumour cavity, with targeted delivery, patient convenience, and decreased toxicity compared to EBRT. We aimed to evaluate the impact of age on recurrence outcomes in IORT-treated early breast cancer patients. Methodology A prospective registry in 2017 was commenced, with inclusion criteria of early breast cancer patients undergoing BCS + IORT (Xoft Axxent eBx) according to a risk-adapted eligibility criteria. Mastectomy patients and those not receiving IORT were excluded. Data regarding clinicopathological characteristics and recurrence outcomes were collected. Results 101 patients were enrolled- average age 66 years and tumour size 15 +/- 7.70mm. 10% of patients received additional EBRT due to positive sentinel lymph node biopsy or tumour biology. At median follow-up of 48 months, local recurrence (2.97%), locoregional recurrence (0.99%), and distant recurrence (0.99%) were reported. Multivariate analysis of demographic variables identified statistical significance in age. An increase in age of 1 year was associated with a 15.2% decrease in recurrence rates (95% CI 24.6% - 1.5%, p<0.05). Conclusion In patients who underwent IORT, increased age significantly predicted decreased recurrence rates. Careful age selection criteria is crucial for optimal IORT outcomes and low recurrence rates. IORT could be an effective treatment strategy for older patients. However, more high-powered studies are required to compare significance in various age groups and other demographic factors.

5:00 pm

<u>Futility in Peritoneal Malignancy and patients undergoing CRS and HIPEC surgery</u> <u>Cherry Koh</u>

Purpose Cytoreductive Surgery and Hyperthermic Intraperitoneal Chemotherapy (CRS+HIPEC) is a radical procedure for patients with peritoneal cancers. Despite the morbid and radical surgery, up to 25% of patients will develop early disease recurrence after curative surgery. For these patients, the surgery is arguably futile. Limited studies had been conducted to identify the predictors of futility in this cohort of patients. The aim of this study is to identify patient and disease characteristics that may lead to early recurrence, perhaps avoid futile surgery and guide clinical decision-making. Method A prospectively maintained electronic database for CRS+HIPEC was reviewed to identify patient, tumour and treatment characteristics that may predict futile surgery. Futile surgery was defined as disease recurrence or death within 12 months of surgery. Patients were classified into futile vs non-futile, and predictors for futility were explored using multivariable regression analysis. Survival was also evaluated between the two groups. Results This study included 197 patients. Using the pre-defined definition for futility, 66 (33.5%) of the patients were deemed futile. Pre-operative Peritoneal Cancer Index (PCI) score is the most predictive factors for predicting futile surgery for CRS+HIPEC (p<0.001). Patients deemed futile had a significantly worse survival than non-futile patients (2-year OS 92% vs 45%, p<0.001) Conclusions The current study highlights the importance of accurate pre-procedural staging in patients planned for CRS+HIPEC. Further studies are warranted to better identify patients at risk of early disease recurrence in order to improve patient selection and long-term oncological outcomes.

5:10 pm

Four-Year Institutional Experience with Targeted Axillary Dissection in Breast Cancer: Outcomes and Evolution of Surgical Practice

<u>Sia Kim</u>

Background Targeted Axillary Dissection (TAD) is now commonly used in breast cancer patients undergoing neoadjuvant therapy (NACT) to minimize the morbidity associated with axillary lymph node dissection. This study explores four years of experience with TAD at Chris O'Brien Lifehouse, focusing on its outcomes and implementation. Methods We analyzed data from 62 patients treated with TAD between 2020 and 2023. The study included patient demographics, tumor and nodal characteristics, surgical approaches, and treatment outcomes. Results The median age of patients was 47 years (IQR 41–57), with 53.2% being premenopausal. Luminal B was the most common tumor subtype (29%), followed by HER2-only (27%), triple-negative (26%), and triple-positive (18%). The mean tumor size was 35.1mm, with 62.9% of tumors measuring 21–50mm. Node involvement was seen in 96.8% of cases, with a median of 1.78 nodes identified. Clipped nodes were

successfully removed in 95.2% of patients, with scout localization achieving 100% accuracy compared to 87% with other methods. Pathologic complete response (pCR) was achieved in 46.7% of patients, highest in HER2-only cases (35.3%). For patients with residual disease, the mean tumor size was 23.4mm. Over the years, fewer nodes were dissected during TAD, reflecting improved localization techniques. Postoperative complications were rare, with only 12.9% requiring seroma aspiration. Conclusion Our findings highlight TAD as a safe and effective approach for axillary management in breast cancer, offering precise node localization and reduced surgical morbidity. With ongoing refinement, TAD continues to enhance outcomes and surgical planning.

5:20 pm

Indocyanine Green versus Technetium-99m for Sentinel Lymph Node Biopsy in Breast Cancer: The FLUORO Trial

Chu Luan Nguyen

Purpose: Gold standard sentinel lymph node (SLN) mapping for breast cancer involves technetium-99m (99mTc) lymphoscintigraphy but has drawbacks. Indocyanine green (ICG) fluorescence allows real-time visualisation of lymphatics and nodes, but routine use is not established. This study compared efficacy and costs between ICG and 99mTc. Methodology: Prospective non-inferiority trial of early breast cancer patients undergoing SLN biopsy with ICG and 99mTc (2021-2024). Number of SLNs identified, including metastatic nodes, and rate of failed mapping, were compared. Surgeon reported ease of use surveyed based on Likert scale from "very easy" to "very difficult" (1-5). Non-inferiority margin of 6% utilised. Cost-minimisation analysis performed using micro-costing analysis. Registered on ANZCTR (ACTRN12621001033831). Results: 305 patients have been enrolled at the end of this 3 year trial. There were no adverse reactions. Mean number of SLNs identified with ICG and 99mTc was 2.06 (SD 1.99) and 2.07 (SD 2.02), respectively (p = 0.871). Metastatic SLNs were identified in 70 of 305 (22.95%) patients, with 83 metastatic SLNs in total, which represented 13.03% of all 637 SLNs removed. ICG identified 79 of 83 (95.2%) positive SLNs and 99mTc identified 82 of 83 (98.8%) (p = 0.256). Mean surgeon reported ease for using ICG and 99mTc was 1.67 (SD 0.98) and 1.5 (SD 0.59), respectively (p = 0.082). Technetium-99m cost an additional AU\$1492.72 per case but ICG would require >35 cases before breaking even with initial outlay equipment costs. Conclusion: ICG fluorescence was equivalent to 99mTc lymphoscintigraphy in terms of number of SLNs identified, including metastatic nodes, rate of failed mapping and safety, and was less costly long-term.

4:00 pm - 5:30 pm Surgical Leaders in the Field

Scientific Session - Surgical Leaders - Meeting Room C4.11

4:00 pm Beyond Technical Skill: The Emotional Intelligence of Surgical Leadership Matthew Rickard

4:30 pm <u>Surgical Advocacy in a Complex Health System</u> <u>Frederick Betros</u>

5:00 pm

<u>Unpleasant Decision Making in Leadership</u> <u>Jaswinder Samra</u>

4:00 pm - 5:30 pm The Bondi Incident

Scientific Session - Trauma Surgery - Meeting Room C3.6

4:00 pm Police Command and Control principles Shane Halliday

4:10 pm

4:20 pm <u>Unaccredited surgical registrar response</u> <u>Michael Cavaye</u>

The Bondi Stabbing Incident of 2024 was a mass casualty trauma response. I was the on call general surgical trauma registrar on site for this day. This is a reflective verbal presentation of the proceedings of the day and subsequent. It acknowledges the knowledge of anatomy and physiology along with personal experiences and skills used on the day to examine a unaccredited surgical registrars experience during a mass casualty.

4:30 pm <u>Responding surgeon</u> <u>Anthony Chambers</u>

4:50 pm <u>Medical administration response SVHA</u> <u>Rajdeep Ubeja</u>

5:00 pm Discussion

5:25 pm <u>Presentation of the Damian McMahon Paper Prize</u> <u>Matthew Hope</u>

05 May 2025

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

Business Meeting - <u>*Cross Discipline*</u> - Darling Harbour Theatre

5:30 pm <u>RACS AGM</u> <u>Kerin Fielding</u>

05 May 2025

6:30 pm - 7:30 pm WOMEN IN SURGERY NETWORKING FUNCTION (TICKETED EVENT)

Cocktail - Women in Surgery - Foyer Level 2

06 May 2025

8:00 am - 10:00 am Capacity and connection in global health

Scientific Session - Global Health, Younger Fellows - Meeting Room C4.10 - Meeting Room C4.9

8:00 am

<u>Complicated Appendicitis in Low- and Lower-Middle-income Countries: A Systematic Review and Meta-</u> <u>Analysis</u>

Renato Pitesa

Purpose: Acute appendicitis is a common surgical emergency worldwide, with significant variations in prevalence, presentation, and outcomes between high income countries (HIC) and low- and middle-income countries (LMIC). Complicated appendicitis has significant implications for LMICs because of limited healthcare resources and infrastructure. Although there is a plethora of evidence for HICs and appendicitis, the evidence for LMIC is lacking. This systematic review aimed to assess and compare the prevalence of complicated appendicitis among low-income countries and lower-middle income countries. Methodology: A systematic review of the literature was conducted according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (PROSPERO CRD42024526007). Observational studies and randomised controlled trials (RCTs) published in PubMed, MEDLINE, Embase, and Scopus between 1990 and 2024 were retrieved. The primary outcome investigated was incidence of complicated appendicitis. Metaanalysis was performed using RStudio Software version 4.3.2. Results: Eighty-seven articles with 25,582 participants were included. Meta-analysis identified an increased pooled proportion of complicated appendicitis (34% [95% CI 27—41%] vs 23% [95% CI 19—27%] p<0.001), increased post-operative morbidity (19% [95% CI 13—27% p<0.01] vs 13% [95% CI 8—20% p<0.01]) and mortality (OR 2.36) in low income countries compared to lower-middle income countries. Conclusion: Appendicitis continues to be a morbid disease in low and lower-middle-income countries. This burden is particularly evident for low-income countries and has significant implications for management.

8:15 am

Modified APPEND Score for the Diagnosis of Acute Appendicitis in a New Zealand Samoan Population. Renato Pitesa

Purpose: Diagnosing acute appendicitis often requires biochemical and imaging support which may not be feasible in low- and middle-income countries (LMICs). The APPEND score, developed in New Zealand, includes C-reactive protein (CRP) which in resource-limited settings, may be hindered by slow processing times. This study aims to evaluate a modified APPEND score (mAPPEND), excluding CRP for diagnosing appendicitis in a New Zealand Samoan cohort prior to evaluation in Samoa. Methodology: This secondary analysis utilized data from two cohorts (2011 and 2017) from Middlemore Hospital, Auckland. Patients aged ≥ 15 years with right iliac fossa pain for < 7 days were included, excluding those with prior appendicectomy or generalised peritonitis. Sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) were calculated, and diagnostic performance was assessed using receiver operating characteristic curve analysis, comparing the area under the curve (AUC) for both scores. Results: Among 53 Samoan patients, the AUC for the APPEND and mAPPEND scores were comparable (0.83 vs. 0.84 respectively, p = 0.57). The mAPPEND score demonstrated high diagnostic accuracy with scores of 0-2 showing 100% NPV and sensitivity, scores 4-5 showing 100% PPV and specificity, and a score of 3 being the most efficient with a sensitivity of 81% and specificity of 68%. Conclusion: The mAPPEND score, maintains high diagnostic accuracy for appendicitis in a New Zealand Samoan population. This modified score is a simple and viable tool in settings where CRP testing is unfeasible, supporting its use in Samoa and potentially other Polynesian people groups in the South Pacific.

8:30 am

An increase in lower extremity amputations from diabetic foot sepsis in Samoa Melanie Spiekermann

Purpose: Diabetic foot sepsis leading to lower extremity amputation is associated with significant morbidity and mortality. Further, it leads to increased operating theatre utilization which disproportionately affects low- and middle-income countries with limited surgical resources such as the Pacific Island Country of Samoa. Samoa has implemented public health initiatives over the last decade to attempt to address the diabetes endemic. Methodology: This is a retrospective, single-centre observational study looking at adults who underwent lower extremity amputation secondary to diabetic foot sepsis in 2016, 2022 and 2023 at Tupua Tamasese Mea'ole Hospital in Samoa. Patient demographics including sex and age as well as clinical information pertaining to comorbidities, HgbAlc, and urban/rural data were obtained. Results: Records were obtained for 420 individuals (51% male) with a mean age of 59.1 years who underwent lower extremity amputations secondary to diabetic foot sepsis in Samoa. There was a statistically significant increase in patients undergoing lower extremity amputations due to diabetic foot sepsis from 81 (2016) to 143 (2022) to 196 (2023) (p < 0.001). Patients from urban areas constituted 47.2% of all amputations compared to 35.4% and 17.4% in the two surrounding rural communities of the islands Upon and Savai'i despite urban areas representing less than 20% of the population (p < 0.001). Conclusion: Despite public health initiatives, there has been a statistical increase in the number of patients undergoing lower extremity amputations secondary to diabetic foot sepsis in Samoa with urban areas experiencing a disproportionate number of amputations compared to rural counterparts.

8:45 am

Early recognition of monkeypox: a literature review and case series Serag Saleh

Purpose: Monkeypox is a viral cutaneous disease characterised by locally destructive skin lesions which predominate in cosmetically- and functionally sensitive areas. Its relatively low incidence and variable appearance result in frequent misdiagnosis as an infective or neoplastic process and subsequent incorrect management. Methodology: A literature review was conducted using the MEDLINE database, identifying 27 articles comprising a total of 1005 patients across 1 systematic review and meta-analysis, 3 cohort studies, 2 case series, 16 case reports, 2 review articles and 3 technical studies. We also present our experience with 2 cases of monkeypox at our institution. Results: Monkeypox lesions present with a characteristic umbilicated, pseudo-pustular morphology and macular-vesicular progression. They have a distinctive distribution centred on anogenital-oral sites of inoculation, with synchronous lesions that typically range from a few to 20 lesions. They occur disproportionately in high-risk subgroups, namely men who have sex with men, men with multiple partners, sexually transmitted disease co-infection including HIV and syphilis, and patients with recent travel to endemic areas. Optimal management comprises early detection, non-surgical management, antiviral therapy in severe cases and active scar management following clearance of infection. Conclusion: The increasing prevalence of monkeypox in Australia represents an emerging reconstructive and cosmetic challenge for plastic surgeons. Effective management requires early recognition and a high index of suspicion in high-risk populations.

9:00 am

The Journal of the CMSA: Challenging existing paradigms in scientific publishing Johannes Fagan

Sharing research is critical to healthcare strategy, quality and access. LMICs represent 80% of the global population but are underrepresented in research. Despite Africa representing 18% of the global population, researchers were involved in only 3% of global research in 2022/3 (1). Most scientific articles are published in Open Access (OA) Journals. Yet Article Processing Charges (APCs) of OA Journals are unaffordable for researchers in LMICs and are a barrier to sharing research (2). LMIC research is often not considered relevant to readers of HIC journals. The Colleges of Medicine of South Africa (CMSA) launched the Journal of the CMSA (JCMSA) in 2023 to advance research equity and to ensure that research from Africa and LMICs is included in global academic discourse. It is fully online and OA and focuses on research from LMICs in all medical and dental sciences. It has had a highly successful launch and is listed with the Directory of Open Access Journals (DOAJ) and has applied for PubMed listing. The JCMSA challenges several paradigms in publishing that will be discussed: journal ownership; diamond OA through APC Waiver Fund; multidisciplinary vs specialty journals; author assist programme; editorial and reviewer organogram; and journal metrics. References 1.Ger N, Lugossy AM, Petrucka P. Status of "African research and its contribution to global health research: a review and an opinion". Discov Public Health 2024; 21:192. https://doi.org/10.1186/s12982-024-00323-6. 2.Seguya A, Salano V, Okerosi S, et al. Are open access article processing charges affordable for otolaryngologists in low-income and middle-income countries? Curr Opin Otolaryngol Head Neck Surg. 2023;31(3):202-7

9:30 am

<u>Clobal Surgery Today: Advancing Access through Advocacy with the G4 Alliance and RACS</u> <u>Neil Wetzig</u>

May 2025 signifies 10 years since the global surgery movement was enhanced by the passage of the WHA Resolution 68:15 'Strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage', the Lancet Commission on Global Surgery and the formation of The Global Alliance for Surgical, Obstetric, Trauma and Anaesthesia Care (G4 Alliance). Great excitement was generated about the potential to improve global surgical access and systems. This presentation explores these 10 years, where the global surgical community is now and what the future holds in the changed world environment. RACS led collection of regional data on Lancet Indicators designed to provide a framework for understanding Surgical Health System functioning, address disparities, and form a basis for development of National Surgical, Obstetric and Anaesthesia Plans. Globally, 32 countries developed such plans, but few were funded for implementation, limiting progress. Covid19 resulted in the WHO pivoting to alternate priorities emphasising pandemic preparedness and a continuum of Emergency, Critical and Operative Care (ECO) with new WHA resolutions and a plan to develop 'a global strategy and action plan for integrated emergency, critical and operative care. Surgical care comprises 1 in 3 cases of primary health care; therefore, it is essential that the surgical community provides strong ongoing advocacy for the strengthening of surgical systems within this ECO framework. RACS membership of the G4 Alliance is critical, for such ongoing international advocacy to improve surgery in the region. Initiatives relating to this will be outlined in this presentation.

8:00 am - 10:00 am

Organ Donation, Organ Utilisation Practices and NRP Access to Transplant

Scientific Session - Transplantation Surgery - Meeting Room C4.6 - Meeting Room C4.7

8:00 am

Organ Donation and utilisation practices in ANZ: Strategies and controversies Helen Opdam

8:20 am

Organ donation and allocation practices in the USA and strategies to improve organ utilisation Douglas Anderson

The past several years have seen significant changes in organ recovery and preservation techniques. This along, with changes in allocation policies in the United States, have significantly affected organ allocation and utilization. In this presentation, we will review these advances, the impact on organ utilization in the United States, and review how we have adapted and incorporated these changes in our practice at UAB.

8:35 am

The UK experience with improving organ donation and utilisation with Normothermic Regional Perfusion (NRP)

lan Currie

8:55 am

The Normothermic Regional Perfusion program in New Zealand Louise Barbier

9:10 am

<u>The Ethical controversy of Normothermic Regional Perfusion in Australia</u> <u>Julian Singer</u>

Normothermic Regional Perfusion (NRP) is an emerging technique in organ donation following circulatory death (DCD) that restores oxygenated blood flow to organs while excluding cerebral circulation. While NRP offers the potential to improve transplant outcomes and increase the donor pool, its use in Australia has raised significant ethical controversy. Concerns centre around the possibility of violating the dead donor rule, the definition and determination of death, and the acceptability of restoring circulation post-mortem. Additionally, there are questions about transparency, consent, and public trust. This session explores the ethical tensions surrounding NRP in the Australian context, highlighting the need for clear national guidelines, community engagement, and ongoing dialogue between clinicians, ethicists, and policymakers to ensure ethically robust and publicly accountable practice.

9:20 am

<u>Strategies to improve organ utilisation and the potential of NRP in Australia</u> <u>Jerome Laurence</u>

It is proposed that organ perfusion in situ after declaration of circulatory death (DCD) is incompatible with the legislated definition of death in Australia. However, this view is inconsistent with the acceptance of our current DCD practices. No formula of words can satisfactorily define death of a person with the precision required to allow preservation of the function of the transplanted organs. The challenge is not legislative change, but cultural acceptance of normothermic regional perfusion in the transplantation, donation and intensive care sectors.

9:28 am Discussion

06 May 2025

Catering - <u>Global Health</u>, <u>Transplantation Surgery</u>, <u>Younger Fellows</u> - Foyer C4.9 - Foyer C4.6 - Foyer C4.7 - Foyer C4.10

06 May 2025

10:30 am - 12:00 pm Challenges in global health engagement

Scientific Session - Global Health, Younger Fellows - Meeting Room C4.10 - Meeting Room C4.9

10:30 am

<u>Achieving Carbon Neutrality in Healthcare: Strategies and Outcomes in South Western Sydney Local Health</u> <u>District 2025</u>

Nityam Bansal

Purpose This study evaluated strategies to achieve carbon neutrality in hospitals within the South Western Sydney Local Health District (SWSLHD), focusing on recycling and renewable energy initiatives localised at Campbelltown Hospital and globally, to highlight specific and innovative approaches to sustainability. Methodology A comprehensive literature review was conducted, analyzing operational data from SWSLHD and global hospital sustainability efforts. The review emphasized waste reduction, recycling programs and renewable energy integration, identifying challenges and cost-effective solutions through comparisons with successful case studies worldwide. Results SWSLHD achieved a 28% carbon footprint reduction from 2017-2018 through economically viable strategies, particularly in a perioperative setting. The "Gloves Off" initiative, targeting a reduction of 47 million disposable gloves annually, and the "Bluey Reduction" campaign, saving 1.5 million absorbent pads, are projected to save \$2.3 million and \$350,000 respectively. Reduced desflurane gas use and 5% lower nitrous oxide emissions were further achieved. Planned programs include 'Clinical Waste Segregation Education', 'Compression Sleeve Recycling', e-discharge summaries reducing paper waste by 50% (\$1.17 million saved annually), and transition to reusable theatre equipment. Globally, wellfunded recycling practices, renewable energy integration, and improvements to heating, ventilation and air conditioning infrastructure demonstrate the greatest potential for impact. Conclusion These initiatives demonstrate SWSLHD's commitment to sustainability and highlights the importance of innovation and investment in achieving carbon neutrality in healthcare systems globally.

10:45 am

<u>A Critical Analysis of Policy Failures and Governance Challenges: The World Health Organisation's Response</u> to the COVID-19 Pandemic

<u>Selwyn Selvendran</u>

The World Health Organisation (WHO) is tasked with coordinating global responses to public health emergencies. The COVID-19 pandemic, which began in December 2019, presented a major test for the WHO's governance frameworks. However, several policy failures—such as delays in key declarations, inconsistent guidance, logistical challenges in resource allocation, and political influences—are considered to have hampered its ability to effectively mitigate the pandemic's spread in the early stages. This article critically assesses the WHO's performance based on available epidemiological data, health systems analysis, and global governance frameworks. The analysis highlights areas of mismanagement and offers actionable recommendations for future pandemic preparedness, governance reforms, and strengthening the WHO's role in public health emergencies.

11:00 am <u>Challenges and Opportunities for delivering surgical care in Gaza</u> <u>Bushra Othman</u>

11:30 am <u>The journey of Pangea – Global health participation as a junior doctor</u> <u>Heidi McAlpine</u> Keynote Lecture - Transplantation Surgery - Meeting Room C4.7 - Meeting Room C4.6

10:30 am

Xenotransplantation - the UAB experience with clinical and laboratory research Douglas Anderson

Xenotransplantation offers a potential solution to the shortage of available human organs for transplantation. Significant progress over the past 3-5 years has pushed xenotransplantation to the brink of clinical translation. In this presentation, we will review recent progress in xenotransplantation, highlighting the UAB experience with the Parsons model of decedent human xenotransplantation, and discuss the potential paths forward for xenotransplantation to become a clinical reality.

10:55 am Discussion

06 May 2025

11:00 am - 12:30 pm The Future of Transplantation

Scientific Session - Transplantation Surgery - Meeting Room C4.6 - Meeting Room C4.7

11:00 am <u>The Uterine Transplant Program in Australia</u> <u>Rebecca Deans</u>

11:20 am <u>The Development of Clinical Xenotransplantation and where are we now including treatments for</u> <u>Diabetes?</u> <u>Wayne Hawthorne</u>

11:37 am <u>Transplant Oncology</u> <u>Ruelan Furtardo</u>

11:47 am Living donor liver transplant Jerome Laurence

Live donor liver transplantation is an established practice around the world, which has yet to find a place in Australia. This presentation discusses the rationale, benefits and challenges of adding live donation to the range of options available to people living with end-stage liver disease.

11:57 am <u>The Future of Kidney Transplant</u> <u>Kate Wyburn</u>

12:07 pm Training future surgeons Ian Currie

12:17 pm <u>Cardiothoracic Transplant: Past/present/future</u> <u>Emily Granger</u>

Heart lung transplantation to continues to evolve, with a focus on optimising donor organ function, minimising the impact of ischaemia, and donation after circulatory death. This presentation will look at the

evolution of donor organ preservation, from the early days using cold static preservation (the esky!) to current hypothermic and normothermic machine perfusion of donor hearts. Temperature has never been more important, even for donor lungs. From machine perfusion of donor hearts to ex vivo optimisation of lungs, the future is here, now.

06 May 2025

12:00 pm - 12:30 pm THE ROWAN NICKS LECTURE - Dr Esther Apuahe (Morobe, Papua New Guinea)

Named Lecture - Younger Fellows, Global Health - Meeting Room C4.9 - Meeting Room C4.10

12:00 pm

<u>Challenges in delivering neurosurgical service in a LMIC country</u> <u>Esther Apuahe</u>

Delivering neurosurgery services in low- and middle-income countries (LMICs) like Papua New Guinea (PNG) presents multiple challenges. Limited resources, infrastructure deficits, and inadequate training for healthcare personnel significantly hinder service efficiency. Access to contemporary medical technology is often restricted, leading to delayed diagnosis and treatment, while the scarcity of neurosurgeons creates long waiting times for patients. Geographic constraints in PNG further exacerbate the situation, as patients in remote areas struggle to reach healthcare facilities due to poor transport networks. Additionally, financial barriers and a lack of health insurance coverage can prevent individuals from seeking necessary surgical interventions. Cultural beliefs and stigma surrounding surgical procedures may also impede patient willingness to undergo treatment. Addressing these challenges requires strategic investments in healthcare infrastructure, increased training for local neurosurgeons, improved patient education, and initiatives to foster equitable access to essential surgical services for all PNG citizens

06 May 2025

12:30 pm - 1:30 pm Lunch - Tuesday

Catering - <u>Transplantation Surgery</u>, <u>Younger Fellows</u>, <u>Global Health</u> - Foyer C4.6 - Foyer C4.10 - Foyer C4.7 - Foyer C4.9

06 May 2025

1:30 pm - 2:30 pm Research Papers

Scientific Session - Transplantation Surgery - Meeting Room C4.6 - Meeting Room C4.7

1:30 pm

IMPART-TRIAL: Negative pressure wound therapy (PREVENA) versus standard dressings for incision management after renal transplant: a multicentre, partially blinded randomised controlled trial Haywood Yeung

Purpose Renal transplant recipients are susceptible to wound complications which can contribute to increased morbidity, re-operation rates as well as increased length of hospitalisation. Negative pressure wound therapy (NPWT) such as the Prevena have been used in complex infected and dehisced wounds in renal transplant recipients. The objective of this study is to determine if the Prevena reduces wound

complications at the closed surgical site following renal transplant, when compared to standard hydrocolloid dressings. Methodology This was a multicentre, partially blinded randomised controlled trial that was performed from January 2020 to December 2023. Patients undergoing a renal transplant at these centres were allocated to one of two treatment arms, where either a Prevena device or standard hydrocolloid dressings was applied to the closed incision. Monitoring occurred during hospitalisation and up to 30 days postoperatively to review any wound complications using the ASEPSIS score. Patients were followed up to a total of 90 days. Results A total of 298 patients were included across 3 sites in Australia. 151 patients received Prevena and 147 patients received standard dressings. The wound complication rates at day 30 for the Prevena group were 23.2% (35/151) and the standard group were 24.5% (36/147). There was no significant difference between the two groups complication rates (p=0.79, OR 0.930 95%CI = 0.546 – 1.585). Conclusion In this randomised controlled trial, the Prevena did not show any improvement in wound complication rates over standard hydrocolloid dressings in renal transplant recipients. However, it is relatively safe with minimal adverse events reported.

1:40 pm

Predicting the risk of surgical complexity in liver transplantation Victor Yu

Purpose: Patients undergoing liver transplantation (LT) are routinely assessed for surgical difficulty, but the predictability of these assessments is unreliable and yet unquantified. We aimed to identify and quantify risk factors for surgical complexity in LT. Methodology: Retrospective review was performed of all adult liver transplants performed at a single centre between 2012 and 2023. Surgical difficulty was defined by three surrogate variables; operating time, estimated blood loss, and intraoperative complications. Patients were allocated points based on their percentiles for each surrogate and subsequently grouped into low (LR), intermediate (IR) and high or very high (HR) risk cohorts. Cohorts were compared based on demographic, biochemical, surgical and radiological data. Chi-square and ANOVA tests were used and odds ratios (OR) calculated with p-values <0.05 considered statistically significant. Results: A total of 771 patients were included in the study (LR; n=225, IR; n=346, HR; n=200). Patients in the HR cohort were associated with significantly longer hospital stay (HR;36, IR;12, LR;13 days, p<0.01) and Clavien-Dindo [][] complications (HR;33.5%, IR;16.5%, LR;12%, p<0.01). Factors contributing to surgical difficulty were re-transplantation (OR 6.48, p<0.01), portal venous thrombosis (OR 5.45, p<0.01), spontaneous bacterial peritonitis (OR 3.61, p<0.01), prior hepatobiliary surgery (OR 2.95, p<0.01) and prior open abdominal surgery (OR 2.95, p<0.01) Conclusions: We identified five key factors associated with significant risk for surgical complexity in LT. These findings highlight the importance of identifying these factors pre-operatively and planning perioperative resources accordingly to optimise outcomes.

1:50 pm

The prognostic significance of pre-operative computed tomography diagnosed sarcopenia on allograft and post-operative outcomes following kidney transplantation: A systematic review and meta-analysis. Khang Duy Ricky Le

Background: The identification of individuals who will benefit most from kidney transplantation is challenging, with no clear consensus as to which clinical features provide the most prognostic information. Recently, computed tomography (CT)-diagnosed sarcopenia has proven to be accurate in predicting poorer outcomes solid organ transplant recipients. This systematic review and meta-analysis evaluates the role of sarcopenia, as defined by pre-operative CT, in the prediction of post-operative recipient and allograft outcomes in patients undergoing kidney transplantation. Methods: A comprehensive literature search was performed on Medline, Embase, Google Scholar and CINAHL databases. Seven articles involving 1153 patients were included in this review. Results: There was strong evidence to suggest that CT-defined sarcopenia was associated with increased mortality (OR 2.72, 95% CI 1.66 – 4.47, p<0.0001) and greater likelihood of readmission (OR 1.98, 95% CI 1.34 – 2.92, p=0.00006). There was a lack of evidence to support the use of pre-operative CT to define sarcopenia as a prognostic factor for allograft and other post-operative outcomes following kidney transplantation. Conclusions: This systematic review and meta-analysis demonstrates evidence to suggest pre-transplant sarcopenia identified on CT imaging is predictive of increased mortality and readmission. Given the limitations of evidence related to risk of bias and heterogeneity, there is a need for more robust prospective research to elucidate the true effect of CT diagnosed sarcopenia as a prognostic factor in the kidney transplant setting.

2:00 pm

Long-Term Ex-Situ Normothermic Machine Perfusion of Rodent Livers: An Innovative Model to Perfuse Grafts Beyond 72 Hours Mark Ly

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2:10 pm
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Establishment of ex vivo Normothermic Machine Perfusion for Evaluation of Marginal Donor Kidneys in Improving Utilization of Donated Kidneys

<u>Qi Rui Soh</u>

Purpose: To establish the technique of ex vivo normothermic machine perfusion (EV NMP) and create a platform for reconditioning and evaluating marginal donor kidneys, with the aim of increasing kidney utilization and improving transplant outcomes. Methodology: A single-centre study was conducted using six non-utilized deceased donor kidneys. Three kidneys underwent EV NMP using a customized cardiopulmonary bypass machine, and three used the commercial Kidney Assist device. Perfusion quality was assessed using macroscopic evaluation, urine output, renal blood flow, and biochemical markers. Histopathological analysis was performed pre- and post-perfusion. Results: All six kidneys demonstrated viability with median urine output of 330 mL over 2 hours and macroscopic assessment scores of ≤3, indicating suitability for transplantation. Perfusate creatinine levels decreased significantly (p=0.02). Following this pilot, two marginal donor kidneys were further evaluated on EV NMP with intention for clinical transplantation. One kidney was accepted for clinical transplantation with satisfactory result. However, the other kidney was not utilized for clinical transplantation due to poor perfusion on macroscopic assessment scores. Conclusion: EV NMP is an emerging technology and promises further evaluation and reconditioning of marginal donor kidneys to increase utilization. This work has supported establishment of EV NMP at our centre, paving the way for clinical trials and future research into optimizing this technology for therapeutic interventions.

2:20 pm

Advancing Immune Monitoring in Transplantation: Tracking Donor-Specific T Cells Using Peptide-MHC **Multimers**

Taeyoung Son

PURPOSE Post-transplant immune monitoring remains limited by a lack of tools to identify donor-specific T cells involved in graft rejection. Our previous work led to the discovery of immunodominant donor peptide-MHC (pMHC) epitopes that account for a large proportion of allo-responses. The aim of this study was to develop pMHC multimer tools incorporating these epitopes to detect and phenotype donor-specific T cells during transplant immune responses. METHODOLOGY BALB/c (H-2d) recipient mice received heart transplants from C57BL/6 (H-2b) donors (total n=18 donor-recipient pairs). Heart-infiltrating leukocytes and splenocytes were examined at different time points post-transplant. The cells were stained with a 12-plex pMHC multimer panel tagged with DNA barcodes and a syngeneic multimer as a control. Single-cell analysis was performed to determine full-length TCR sequences, transcriptomes, and pMHC specificity. RESULTS The multimer panel identified a substantial proportion of donor-specific T cells in rejecting heart grafts compared to the negative control (20.3±1.1% vs 0.4±0.1%, p<0.001). The proportion of donor-specific T cells from the spleens was much higher on day 7 post-transplant compared to their pre-transplant stage (3.6±0.3% vs 1.3±0.2%, p<0.005). Single-cell analysis revealed distinct phenotypes and clonal expansion of donor-specific T cells during graft rejection. CONCLUSION This study represents a significant advance by enabling precise monitoring of donor-specific T cells. The findings have translational potential for improving transplant immune response monitoring, optimising immunosuppressive therapies, and facilitating the development of tolerance-inducing protocols in clinical transplantation.

06 May 2025

2:30 pm - 2:45 pm Break - Tuesdav

Catering - Transplantation Surgery - Foyer C4.6 - Foyer C4.7

06 May 2025

2:45 pm - 4:15 pm **Machine Perfusion**

2:45 pm <u>Machine perfusion - UAB/USA experience</u> <u>Douglas Anderson</u>

Machine perfusion of abdominal organs has developed dramatically over the past several years, increasing the organ supply by expanding acceptable organ criteria and allowing for broader sharing of organs. Multiple differing perfusion technologies exist and have been used variably for kidneys and livers. In this presentation, we will review the machine perfusion technologies available, assessing the strengths and drawbacks of each, and discuss their implementation at UAB and the USA more broadly.

2:55 pm Evolution of machine perfusion in PA, Brisbane Nick Butler

3:05 pm <u>Machine perfusion - Westmead experience</u> <u>Henry Pleass</u>

3:15 pm <u>Machine perfusion - RPA experience</u> <u>Carlo Pulitano, Carlo Pulitano</u>

3:25 pm Machine perfusion HOPE experience - Austin, Melbourne Ruelan Furtardo

3:33 pm Discussion