Oral Presentations - On-line Meeting
Collaboration in Surgery

Program - 10 September 2020

Royal Australasian College of Surgeons

Committed to Indigenous health
RACS acknowledges the Traditional Owners of country throughout Australia and recognises their continuing connection to land, waters and community.
We pay our respects to them and their cultures and to Elders both past and present.

Table of Contents

Abstract No: 4

NON-OPERATIVE MANAGEMENT FOR SMALL BOWEL OBSTRUCTION IN A VIRGIN ABDOMEN: A SYSTEMATIC REVIEW

Dr TZE WEI WILSON YANG, Dr Swetha Prabhakaran, Mr Stephen Bell, Mr Martin Chin, Mr Peter Carne, Mr Satish K Warrier, Mr Stewart Skinner, Mr Joseph Cherng Kong
Alfred Health

Biography:
Dr Wilson Yang is a current unaccredited general surgical registrar at Alfred Health. He completed his MBBS (Hons) at Monash University in 2015, post graduate diploma of surgical anatomy with The University of Melbourne in 2017 and Masters of Surgery (Surgical Sciences) with The University of Sydney in 2020.

Background: Small bowel obstruction (SBO) is a common general surgical presentation and there has been a shift to non-operative management (NOM) for patients with previous abdominal surgery. Historically, exploratory surgery was mandated for SBO in patients with virgin abdomen although there is little evidence to support this notion. Recently, there is increasing evidence for NOM in this group of patients.

Methods: A systematic review was performed according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A search was undertaken between 1995-2020 on Ovid MEDLINE, EMBASE and PubMed. Primary outcome measures were success and failure rates, whereas secondary outcome measures were morbidity, mortality rates and identifying underlying etiologies.

Results: Six observational studies were included, with 205 patients in NOM and 211 patients in operative group. There was a high success rate of 95.6% and low morbidity rate of 3.1% in the NOM group compared to 88.6% and 26% in the operative group respectively. Both groups reported no mortality. The most common etiologies for SBO in a virgin abdomen were adhesions (63%), malignancy (11%), foreign body/bezoar (5%), internal hernia (4%) and volvulus (4%).

Conclusion: NOM for SBO is a safe and feasible option in patients with a virgin abdomen if the risk of strangulation is low. Adhesions are the most common cause of SBO in this group of patients. Further large scale prospective clinical studies with standardized NOM modality, homogenous clinical resolution indicators and long term follow-up data are warranted to allow for quantitative analysis to reinforce this evidence.

Abstract No: 6

IS CAVITY PACKING FOLLOWING CUTANEOUS ABSCESS DRAINAGE NECESSARY? A SYSTEMATIC REVIEW AND META-ANALYSIS

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Eastern Health[1], Monash University Eastern Health Clinical School[2]

Biography:
Janindu is a SET 4 general surgical trainee who has a keen interest in clinical research, in the fields of hernia, upper gastrointestinal and bariatric surgery. He has previously received the Noel Newton Medal and the Jim Pryor Begonia Prize for his clinical research in these fields.

Aim This meta-analysis aims to analyse the difference in outcome between a packed group (PG) and a non-packed group (NPG) of patients post drainage of simple cutaneous abscesses.

Methodology A Systematic review of full-text articles of patients who underwent incision and drainage of simple cutaneous abscesses with packing or no packing was performed. Cochrane risk of bias tool was used for quality assessment. The meta-analysis was performed using Mantel–Haenszel method.

Results 217 patients from four studies were included; three randomised controlled trials (RCTs) and one cohort study. No significant difference was observed in the primary outcome of recurrence of abscess post drainage in the PG compared to the NPG for simple cutaneous abscesses, in the fixed effects model (Relative risk [95% confidence interval]: 2.34[0.90,6.10]) with no heterogeneity between studies (I2=0%,P=0.08). The risk of reoccurrence was not significantly different between the PG and the NPG in the emergency department (RR [95% CI]: 2.54[0.84,7.64]) and operating theatre setting (RR [95% CI]: 1.82[0.25,13.07]). Quality assessment demonstrated all three RCTs were low quality with an overall high risk of bias.

Conclusion Based on the limited number of low quality small studies, there is data to support elimination of routine cavity packing post drainage in immunocompetent patients. Similar outcomes can be obtained in the emergency department setting, highlighting the importance of collaborating with emergency physicians. Multicenter RCTs in adult population focusing on functional outcomes such as time taken to return to work and economic burden due to use of extra resources would be beneficial.

Abstract No: 9

AUSTRALIAN PEDESTRIAN INJURIES: DEMOGRAPHY, INJURY PROFILE AND BURDEN

Dr HUMAIRA HAIDER MAHIN, Dr Anna Devlin, Dr Soni Putnis, Prof Kate Curtis
The primary institution is Monash University in collaboration with Alfred health and Australia New Zealand Trauma Registry.

Biography:
Humaira is a multilingual surgical registrar in Wollongong hospital. In her resident year, she was awarded as a resident of the year for her ability to work in a cooperative context. Currently, she is leading a few research projects, those are: Generation Y learning preferences, Protease expression in Follicular thyroid neoplasm and Australian pedestrian injury to understand the demography, injury profile and burden.

Purpose of study: The leading global cause of death for young people aged 5-29 years is road traffic accidents. This accounts for 1.35 million deaths worldwide, ¼ of which is borne by pedestrians. The aim of this study is to describe current epidemiology of pedestrian trauma across Australia, using data from the Australia New Zealand Trauma Registry (ATR).

Methods: Patient demographic information, injury event details, injury intent, injury diagnosis information, acute care outcomes will be extracted from the ATR. Acute care outcomes will include systolic blood pressure on arrival, first spontaneous respiratory rate on arrival, total Glasgow Coma Scale on arrival, patient intubation, operative procedures occurring in hospital, length of stay in hospital and intensive care unit (ICU), and severe complications. Mortality will be the main outcome. Other measures will be discharge home, rehabilitation, time from emergency to ward or ICU and need for theatre. The Charlson Comorbidity Index, drawn from ICD-10 codes, will be used to measure comorbid health conditions. Socioeconomic status will be evaluated using the Index of Socioeconomic Advantage and Disadvantage, employing residential postcode.

Results: Demographic profiles of population characteristics from major trauma centres across Australia will be reported using descriptive statistics. Logistic regression will be applied to investigate risk factors for pedestrian mortality.

Conclusion: This will be the first reported comparison of injury outcome in pedestrian trauma across Australia. It will foster national cooperation to drive improvements in trauma in line with use of ATR to feed into the Australian Trauma Quality Improvement Program, establishing collaboration between 26 major Australian trauma centres.

Abstract No: 11

SURGICAL TRAINEE COLLABORATIVE RESEARCH CAN EFFECTIVELY DELIVER INTERNATIONAL MULTICENTRE RANDOMISED CONTROLLED TRIALS.

Dr UYEN G VO*
Fiona Stanley Hospital

Biography:
Uyen Vo, known as Jess, graduated from and is currently working in Perth, Western Australia. She is passionate about research and hopes to continue developing this interest over the course of her career. Jess completed a Bachelor of Medicine, Bachelor of Surgery at the University of Western Australia. She is currently working a pre-vocational surgical registrar. At present, Jess is involved with research in the areas of vascular surgery and negative pressure wound therapy under the supervision of Prof Toby Richards.

Introduction. The introduction of surgical trainee's collaboratives are novel to Australia and have recently have developed nascent research networks. We wished to assess whether the trainee Australian surgical trainee collaborative network can feasibly run a large-scale research projects, at an international level.

Methods. The SUNRRISE clinical trial (Single Use Negative pRessure dressing for Reduction In Surgical site infection following Emergency laparotomy) is an Australian & UK multi-centre randomised controlled trial. Supported by RACS Clinical Trials Network Australia New Zealand senior surgeons acted in a mentoring and oversight capacity to enable trainees. We assessed; trainee participation, GCP certification, site set up, patient recruitment, and outcome reporting.

Results. SUNRRISE opened in Australia in Q1 2020; 65 trainees at eight centres completed GCP certification. In half of sites (4) senior surgeons mentored a trainee to replace them as Principle Investigator. Trainees successfully enrolled 141/210 target trial participants at a rate of >5 per month per centre. This was 50% ahead of predicted recruitment and better than the UK. Data was 72-96% completed at the time of reporting.

Conclusion. Australian trainee-led collaboratives are capable of leading high-quality research trials. These could provide compliance with RACS research requirements.

Footnotes
**on behalf of the SUNRRISE collaborative.*

Abstract No: 13

DISPARITY IN THE INCIDENCE OF PNEUMONIA AFTER CARDIAC SURGERY BETWEEN INDIGENOUS AND NON-INDIGENOUS PEOPLE IN AUSTRALIA.

JESSY NELLIPUDI, Robert A. Baker, Richard F. Newland, Bronwyn Krieg, Jayme S. Bennetts
Flinders Medical Centre

Biography:
Cardiothoracic Service Registrar at Flinders Medical Centre

Purpose There are no studies which evaluate the incidence of pneumonia post-cardiac surgery between Indigenous and non-Indigenous populations. Therefore, we aim to evaluate the incidence of pneumonia between these two groups.

Methodology: We reviewed consecutive patients who underwent cardiac surgery between January 2008 and December 2018 (n = 4326). All data were collected prospectively and stored in the local database. We compared Indigenous (n = 763) and Non-Indigenous patients (n = 3565) to evaluate incidence of pneumonia. Fisher exact method, Pearsons chi-squared or Wilcoxon rank-sum test were used for statistical analysis.

Results Indigenous patients were younger (median (IQR); age 47 (37-55) vs 67 (58-75), p<0.001), more likely to have diabetes (41% vs 30%, p<0.001), renal disease pre-operatively requiring dialysis (8% vs 2%, p<0.001), history of smoking (79% vs 67%, p<0.001), history of excessive alcohol intake (34% vs 9%, p <0.001) and undergo a redo procedure (12% vs 5%, p<0.001. Incidence of pneumonia in Indigenous patients was 22% (n = 163) compared to 12% (n=428) in non-indigenous patients (P <0.001).

Conclusion Indigenous patients undergoing cardiac surgery had a higher incidence of pneumonia. Reducing modifiable risk factors such as smoking and alcohol intake may be beneficial in reducing this disparity between indigenous and non-Indigenous patients.

Abstract No: 15

MASSIVE OPEN ONLINE COURSES USE IN SURGERY: A SYSTEMATIC REVIEW OF USER-PERCEIVED

Dr. LISA J ELLIS, Dr. Kamsajini Thillainathan, Dr. Stephen Goldie, Prof. Warren M Rozen, Prof. David J
Peninsula Health

Biography:
Dr. Lisa Ellis is an unaccredited plastic surgery registrar currently working at Peninsula Health. She is currently undertaking a Masters of Surgery focusing on the use of Massive Online Open Courses for pre-vocational education in junior doctors and medical students in the field of Plastic and Reconstructive Surgery.

PURPOSE:: For surgeons and surgeons in training, the progressive restriction on work hours demands a novel approach to knowledge acquisition. The utility of an online curriculum which can be readily accessed by health professionals and the public alike is clear. Massive online open courses (MOOCs) are free courses delivered over the internet in which anyone can participate and are becoming increasingly available in the area of health and medicine. Our aim was to identify the efficacy of MOOCs as an educational tool in the surgical setting.

METHODOLOGY: A systematic search the English literature was undertaken, assessing the learner-perceived benefits of MOOCs for education on surgical topics. Data collected included MOOC topic, intended audience, and outcome measures used to assess learner-perceived efficacy. This study was conducted in line with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.

RESULTS: Five of 274 articles met our inclusion criteria. MOOCs assessed had covered the topics of urology, abdominal anatomy, bariatric surgery and kidney, pancreas and islet transplantation and targeted patients, health professionals and medical students. In all studies, the majority of learners reported achieving learning outcomes, finding the MOOCs interesting or finding the MOOC to be a useful learning tool compared to other resources available.

CONCLUSION: Current literature supports MOOCs as a promising tool in surgical education for patients, medical students and health professionals alike. The development and study of further MOOCs for use in education of medical students, junior doctors and patients alike in the area of surgery is recommended.

Abstract No: 16

HEALTH-RELATED QUALITY OF LIFE IN NECROTISING SOFT TISSUE INFECTION SURVIVORS: PERSPECTIVE FROM AN AUSTRALIAN TERTIARY REFERRAL CENTRE

Mr PATRICK LU, Ms Margaret Angliss, Dr Frank Bruscino-Raiola
Alfred Hospital

Biography:
Patrick Lu is a final year medical student from Monash University. He completed a bachelor of medical science honours degree at the Victorian Adult Burns Service last year, which sparked an interest in both clinical research and plastic surgery. He is hoping to pursue a career combining these two interests.

Purpose/Aim Necrotising soft tissue infections (NSTI) is a life threatening disease with widespread tissue destruction. Immediate and aggressive surgical debridement remains the main focus of treatment. This results in disfiguring scars, functional limitation and psychological sequelae for survivors. As mortality rate declines with improvements in care, a greater focus should be placed upon the psychological and functional outcomes of survivors. This study aims of to assess the health-related quality of life (HRQoL) of patients following NSTI using the Short Form-36 (SF-36) and Derriford Appearance Scale-24 (DAS-24).

Methodology All NSTI patients admitted at our tertiary referral centre between 1 January 2013 to 31 December 2019 were invited to complete the DAS-24 and SF-36 surveys. A retrospective chart review was also performed.

Results 30 participants responded to the surveys. On comparison against the general Australian population, the NSTI cohort demonstrated significantly reduced physical and mental health-related quality of life (HRQoL) as measured by the SF-36 ($p<0.001$). Increased age was significantly associated with a reduced physical HRQoL ($p=0.002$), while dysfunction with appearance as measured by the DAS-24 form correlated with both reduced physical and mental HRQoL ($p=0.020$). 79.3% of patients expressed concern regarding their appearance with a significantly higher level of distress at their appearance compared to a non-clinical population ($p=0.120$).

Conclusion/Discussion Despite the rarity of NSTI, this study demonstrates that this disease has a large and persistent burden for survivors, who report significantly reduced HRQoL and distress with appearance. Further research into comprehensive physical and psychosocial services for NSTI survivors is required.

Abstract No: 17

DO DRAIN TUBES HELP REDUCE RISKS OF POST-OPERATIVE COMPLICATIONS IN COMPLEX INCISIONAL HERNIA REPAIR (AS DEFINED BY A RECENT COURT RULING)?

DURR-E-NAYAB MASOOD, Yuchen Luo, Sara Mohammed Jinnaah, Mark Tacey, Russell Hodgson
Northern Health

Biography:
Overseas graduated surgical resident at Northern Health, Victoria, with a keen interest in Upper GI and Trauma Surgery

Background A recent legal case described in the ANZ Journal of Surgery has sparked significant topical interest in drain tube use in incisional hernia repairs in Australia. This study reviews a single centre experience of drain tube use in incisional hernia repair.

Methods Data from online clinical records was collected retrospectively from patients that underwent incisional hernia repair from the 1st January 2013 to the 31st December 2017. 'Complexity' factors of smoking, obesity and lower midline incision (as identified by the legal case) were also used to stratify groups.

Results 410 incisional hernia repair cases were identified during the 5-year period. Median length of stay of the non-drain placement group was significantly shorter than that of the drain placement group (2 vs 6 days, $p<0.001$). 10.8% of patients with drain suffered from post-op wound infection compared to 3.6% in patients without a drain tube in-situ ($p=0.005$). Seroma rates were no different with or without a drain (15.7% vs 16.9% $p=0.78$). When stratified by 'complexity', there was a trend towards increased complications when drains were used.

Conclusion Drain tubes were placed in only a small proportion of patients during incisional hernia repairs and were associated with a higher post-operative wound infection rate. When stratified by the 'complexity' factors outlined by the recent legal case, complications in more 'complex' patients may actually increase when a drain tube is used.

Abstract No: 18

LOCAL ANAESTHETIC FOR PAIN POST RUBBER BAND LIGATION OF HAEMORRHOIDS: A RANDOMISED CONTROLLED TRIAL

Dr CHRISTOPHER STEEN, Dr Yeo Min Cho, Mr Vinna An, Mr Vikram Balakrishnan, Mr Raaj Chandra
Department of Colorectal Surgery, Eastern Health, Victoria, Australia

Biography:
Dr Christopher Steen is a SET 3 general surgical trainee based out of Eastern Health with an interest in general and colorectal surgery. When not working he enjoys spending time with his family and travelling.

Rubber band ligation (RBL) is a safe, simple and economical treatment for haemorrhoids. Pain is the most common complaint post haemorrhoid RBL. Several randomised controlled trials have compared the use of local anaesthetic (LA) versus no LA for pain relief post RBL, with variable results.

Study aims: This study aimed to conduct a prospective, single-blinded randomised controlled trial to determine whether the addition of an intra-operative submucosal injection of LA to the base of the ligated haemorrhoid would reduce early post-operative pain in comparison to those patients undergoing RBL without LA.

Secondary aims included perceived perianal numbness, oral analgesia usage and adverse events reported. Methods: Sixty patients were randomised to either an RBL group receiving bupivacaine 0.5% with adrenaline 1:200,000, or to a control group not receiving LA. Post-operative pain was measured using visual analogue scales at 1hr, 4hrs, 24hrs and 48hrs post procedure. Secondary outcomes were recorded at discharge and 48hrs following discharge.

Results: At 1 hour post-procedure, pain scores were significantly reduced in the LA intervention group (1.59) when compared to the control group (3.56, $p<.05$). However, there were no significant differences in pain scores between the groups at any other time interval.

Additionally, there were no significant differences between groups with respect to perceived perianal numbness, oral analgesia consumption or adverse events. Conclusion: The use of LA during haemorrhoidal RBL significantly reduces pain in the immediate post-operative period. It is a safe and well tolerated adjunct to RBL.

Footnotes
Department of Colorectal Surgery, Eastern Health, Victoria, Australia

Abstract No: 20

TARGETED PLASMA MEMBRANE GENE KNOCKDOWNS VIA PH-SENSITIVE CARBONATE APPETITE NANOPARTICLES TO MITIGATE CHEMO-RESISTANCE IN HIGHLY AGGRESSIVE METASTATIC BREAST CANCERS

Dr BALAKAVITHA BALARAVI PILLAI, Prof. Dr. Ezharul Chowdhury, Dr. Maeirah Ashaie
Monash University

Biography:
Kavitha is currently a pre-SET General Surgery registrar with Eastern Health. She has a special interest in translational research in paediatric and oncological surgery. While obtaining her MBBS from Monash University, Kavitha chose to undertake a project on targeted therapeutics and drug delivery using a novel nanoparticle developed by her supervisor's lab. She is a firm believer in bringing molecular-based research to further surgical sciences and therapeutics.

Introduction: A major drawback for the successful treatment of many cancers is the development of multidrug resistance (MDR). Differential expression of plasma membrane ion channels and transport proteins has been observed in both oestrogen-sensitive and triple-negative breast cancer [1]. The hypothesis that siRNA mediated gene knockdown of cation channels and transporters via ria a specific pH-sensitive-inorganic-nanoparticle patented by our lab :carbonate apatite (CA) was tested for the outcome of reducing drug resistant breast cancer cell viability .

Methods: Triple-negative and oestrogen-sensitive breast cancer cell lines mCF-7 and 4T1 were chosen for gene knockdown facilitated by short interfering RNAs (siRNAs), delivered via nanoparticle vectors, in vitro. Calcium based nanoparticles were formulated as per protocol and loaded individually as well as in combination with 12 different siRNAs to knockdown magnesium, sodium and calcium ion channels and transporters [2]. A selection siRNAs against were shortlisted based on their potent cytotoxic effects in various combination. Cell viability assays and protein analysis using Western blot staining with antibodies for Akt and MAPK were performed for confirmation[3,4].

Results: Individual knockdown of TRPC6, TRPM8, SLC41A2, ORAI1 and ORAI3 genes showed significant reduction of cell viability in both aggressive cell lines. The combination of TRPC6, TRPM8, SLC41A2 and MAGT1 siRNAs delivered via CA produced greatest cell viability reduction, resulting a cytotoxicity effect of 57.06 ±3.72 %($p<0.05$) and 59.83±2.309 % ($p=0.09$) to 4T1 and MCF-7 cell lines, respectively. The above combination significantly altered Akt and MAPK proteins in Western Blot analysis when compared to controls.

Conclusion: The CA-siRNA facilitated gene knockdown of TRPC6, TRPM8, MAGT1 and SLC41A2 greatly reduces cell viability of MCF-7 and 4T1 breast cancer cells, in vitro. Thus, deregulating cell proliferation and anti-apoptotic pathways modulated by calcium and magnesium signalling in Akt and MAPK pathways in these aggressive breast carcinoma cells lines. The siRNA delivery via CA nanoparticles potentially could be used in combination with current chemotherapeautic drugs to potentiate its effects in multi-drug resistant cancer.

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Abstract No: 55

INDETERMINATE (B3) BREAST LESIONS AND THE ONGOING ROLE OF DIAGNOSTIC OPEN BIOPSY

Dr ELIZABETH TAN, Miss Joyce Sharp, Mr Michael Cheng, Mr Asiri Arachchi, Mr Suranga, Dr Darren Lockie
Eastern health

Biography:
Elizabeth is a general surgical SET 3 trainee at monash health. Her presentation is based on research done at her previous hospital eastern health. This is regarding the ongoing management of indeterminate breast lesions. With advances in the radiological field and vaccum assisted excision, is diagnostic open biopsy still necessary?

Purpose: Due to their uncertain malignant potential, indeterminate breast lesions on core needle biopsy (CNB) require diagnostic open biopsy. Given largely benign final pathology, the aim was to evaluate if diagnostic open biopsy is required. The lesions included are papilloma, atypical ductal hyperplasia (ADH), atypical lobular hyperplasia (ALH), and radial scar/complex sclerosing lesions (CSL).

Methodology: A retrospective audit from 2010-2017 was performed; analysing Maroondah Breast Screen clients with a screen-detected B3 lesion, and subsequent indeterminate CNB diagnosis. Primary outcome was the malignancy upgrade rate; with secondary evaluation of patient factors predictive of malignancy. These factors were age, symptoms, mammogram characteristics, lesion size, biopsy method, past and family history.

Results: 153 patients (median age 57 years) were included, with papillomas being the largest subgroup (44.44%). On final excisional histology, 94.12% were benign; resulting in a 5.88% malignancy upgrade rate. 88.89% of malignant lesions were from the age >50 group (PPV6.06%); 66.67% of malignant lesions were from the imaging size < 5mm group (PPV6.74%). 55.56% of malignant lesions were from the mammographic microcalcification group. All 9 malignancies were from the asymptomatic (PPV 6.57%) and negative past history subgroup, whilst 77.78% of malignancies had no family history (PPV 6.36%).

Conclusion: Albeit a low 5.88% malignancy upgrade rate, no statistically significant patient predictive factors were identified. Even with vacuum-assisted excision (VAE) techniques, diagnostic open biopsy remains the standard of care following a B3 lesion's indeterminate CNB diagnosis. More research and a multidisciplinary collaborative3 approach regarding predictive factors of malignancy is required.

Abstract No: 56

HEPARIN INFUSION USE IN FREE TISSUE TRANSFER

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Princess Alexandra Hospital

Biography:
Dr Lisa Scupham is a surgical principal house officer at Townsville Hospital. She has completed a Bachelors of Pharmacy and Bachelor or Medicine and Surgery with the University of Queensland. Lisa is pursuing a career in plastics and reconstructive surgery.

Purpose Anticoagulation is used to prevent and treat, often catastrophic, thrombotic complications in microvascular free tissue transfers (FTTs). However, lack of evidence and concern for haematoma formation at the inset site limits its use. This study aims to investigate the use of intravenous heparin (IVH) infusions in patients undergoing FTT to, firstly, clarify the indications; secondly, quantify flap outcomes; and thirdly, identify high risk sub-group.

Methodology A ten year retrospective chart review of patients who had undergone FTT and required heparin infusions was performed. Comparative data analysis against control group was completed using SPSS software. Further analysis of activated thromboplastin time (aPTT) data was achieved by finding area under the curve (AUC) with Geogebra.

Results Fifty-five patients underwent 56 FTTs and required IVH infusion during perioperative period. There was significantly increased rate of both haematoma (RR 4.4, $p<0.001$) and thrombotic (RR 2.9, $p = 0.001$) complications in the heparin group compared to controls. Flaps with haematoma and thrombosis showed a 6.5 and a 12-fold increased risk of flap loss, respectively. Overall, there is a 5.6-fold increase risk of flap loss if any of these complications occurred in the heparin group compared to controls ($p<0.001$). aPTT analysis showed that lower mean of total AUC per hour had greater risk of thrombosis ($p<0.001$).

Conclusion Heparin infusions had significant rates of haematoma formation that resulted in flap loss. Furthermore, thrombosis may not necessarily be prevented given increased rates in the heparin group, perhaps owing to inadequate levels of therapeutic aPTT.

Abstract No: 62

PATIENT SATISFACTION IN EMERGENCY GENERAL SURGERY; A PROSPECTIVE CROSS-SECTIONAL STUDY.

Dr NED KINNEAR [1,2], Dr Matheesha Herath [3], Dr Samantha Jolly [3], Dr Jennie Han [3], Dr Minh Tran [3], Dr Dominic Parker (3), Dr Michael O'Callaghan [1,4,5], Mr Derek Hennessey [6], Mr Christopher Dobbins [3], Mr Tarik Sammour [2,3], Mr James Moore [2,3].
Royal Adelaide Hospital

Biography:
Ned is an nSET 3 urology registrar, currently working at Ballarat Health Service. He interrupted his training in 2019 to focus on his PhD at the University of Adelaide, on the acute surgical unit model.

Aim The importance of the patient experience is increasingly being recognised. However, there is a dearth of studies regarding factors affecting patient reported outcomes in emergency general surgery (EGS), including none from the Southern Hemisphere. We aim to prospectively assess factors associated with patient satisfaction in this setting.

Methodology In this prospective cross-sectional study, all consecutive adult patients admitted to an acute surgical unit over four weeks were invited to complete a validated Patient Reported Experience Measures questionnaire. These were completed either in-person when discharge was imminent or by telephone <4 weeks post-discharge. Responses were used to determine factors associated with overall patient satisfaction.

Results From 146 eligible patients, 100 (68%) completed the questionnaire, with a mean overall satisfaction score of 8.3/10. On multi-variate analyses, eight factors were significantly associated with increased overall satisfaction. Five of these were similar to those previously prescribed by other like studies, being patient age >50 years, sufficient analgesia, satisfaction with the level of senior medical staff, important questions answered by nurses and confidence in decisions made about treatment. Three identified factors were new; sufficient privacy in the emergency department, sufficient notice prior to discharge and feeling well looked after in hospital.

Conclusion Factors associated with patient satisfaction were identified at multiple points of the patient journey. While some of these have been reported in similar studies, most differed. Hospitals should assess factors valued by their EGS population prior to implementing initiatives to improve patient satisfaction.

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