surgical SHO rota. Data collected included demographics, approach (open or laparoscopic), grade of the 1st operator & 1st assistant, and to ascertain if the procedure was complicated or not. All records were independently scrutinised by a second reviewer.

**Results:** An SHO was the 1st operator in 9.9%, and present in 78.8% of cases. The percentage of performed cases was highest in laparoscopic cases, in younger males (12.7%).

**Conclusions:** The proportion of 1st operator SHOs remained considerably lower than data from previous decades. Our data highlighted simple factors, such as gender and age, which favour SHOs as 1st operators. The emphasis should perhaps focus on identifying cases which, owing to several factors, are more suited for SHOs to perform, in order to improve experience.

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**0430: ARE WE NOT DOING ENOUGH? RISE IN ACUTE TONSILLITIS AND DEEP NECK ABSCESSES IN WALES**

D. Yap, , A. Harris, J. Clarke. Royal Covent Hospital, Newport, UK.

**Aim:** Sore throat and tonsillitis represent a significant burden to the National Health Service (NHS). With the introduction of ‘procedures of low clinical effectiveness’; we have seen a large reduction in number of tonsillectomies performed. We carried out a cross-sectional study of the correlation of complication secondary to the reduction of tonsillectomies.

**Method:** Data were extracted from the Patient Episode Database of Wales (PEDW). Microsoft Excel were used to analyse the results.

**Results:** Between 1999 to 2014, the amount of tonsillectis rose by almost 3 folds (Pearson’s r=0.968). The rate of admission for peritonsillar abscess rose by 48% (r=0.857) and retro/parapharyngeal abscess admission have also been rising (r=0.709). The amount of tonsillectomy performed per 100,000 population remained almost the same (r=−0.16).

There is a positive correlation between amount of tonsillectomy performed and number of peritonsillar abscess admission (R2 = 0.016, p = 0.07) as well as retropharyngeal abscess(R2 = 0.007, p = 0.00016). Whereas there is no correlation between the amount of tonsillectomy to the amount of tonsillectomy performed. (R2 = 0.017, p = 0.07)

**Conclusion:** The rise in the retro and parapharyngeal abscess rate is alarming as these conditions are associated with high mortality. The reduction in tonsillectomy rate correlates with significant raise in emergency admissions.

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**0388: RISK FACTORS FOR LIFE THREATENING MESENTERIC ISCHAEMIA AFTER CARDIAC SURGERY: DEVELOPMENT OF AN EARLY DIAGNOSTIC SCORING SYSTEM**

A. Behbahani, 1, S. Datta, , 1 Wrightington, Wigan and Leigh NHS Foundation Trust, Wigan, UK; 2 Central Manchester University Hospitals NHS Foundation Trust, Manchester, UK.

**Aim:** Mesenteric ischaemia (M.Isch.) after cardiac surgery carries a high mortality rate. Identification of preoperative, perioperative and post-operative risk factors and early diagnostic blood markers potentiates early diagnosis.

**Methods:** Patients with post cardiac surgery M.Isch. between the years 2000 - 2011 were selected. Over 150 variables were assessed. Data was collected from patient notes and the departmental database and was analysed using the SPSS software.

**Results:** 86 patients were identified; a full dataset was obtained for 36. Overall incidence was 0.8% with a mortality of 73.26%. Risk factors included pre-operative hypertension, smoking, dyspnoea, haemodialysis, atrial fibrillation, angina and peri-operative use of intra-aortic balloon pumps especially in emergency coronary artery bypass graft and valve surgeries. Average BMI was 28.00 and post-operatively 66.7% had diarrhoea prior to M.Isch. Biochemical indicators included: abnormal blood lactate, pH and c-reactive protein (CRP) levels.

26 patients underwent a diagnostic laparotomy; negative and positive outcomes were compared using a t-test with significant (p<0.05) differences noted in post-diagnosis glucose and pre-diagnosis CRP, base excess, lactate and bicarbonate levels.

**Conclusion:** This study provides sufficient data to perform a propensity score matched analysis to establish a scoring system for the early diagnosis and treatment of M.Isch. to reduce mortality rates.

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**Posters of distinction prize session 2**

**1018: REDUCING THE INTRAOCULAR PRESSURE RISE THAT OCCURS DURING LAPAROSCOPIC SURGERY: IS ACETAZOLAMIDE THE ANSWER?**

P. Vitish-Sharma, , A. Abbas, C. Maxwell-Armstrong, A. King, A.G. Acheson. Nottingham University NSH Trust, Nottingham, UK.

**Background:** Perioperative vision loss following laparoscopic colorectal surgery has been reported. Studies show Trendelenburg positioning during surgery can produce a significant rise in the IOP, and this rise is thought to be a possible factor. Acetazolamide decreases IOP by reducing the formation of aqueous humour.

**Aims:** Investigate if acetazolamide reduces the IOP rise resulting from Trendelenburg positioning.

**Methods:** A randomised cross-over blinded pilot study. Nine healthy volunteers were randomised to start with the placebo or Acetazolamide with a 5 days’ washout period. Baseline IOP was measured on both days. After 1.5 hours of taking the medication, volunteers lay head-down at 17 degrees’ for 4 hours and IOP measurements repeated. This reading was subtracted from the baseline to give a ‘change in IOP’.

**Results:** Of the 9 volunteers, 2 were male and 7 female with an average age of 54 years (range: 21–76). The mean change in IOP after the placebo was −2.15mmHg (SD 3.34), after Acetazolamide was 0.17mmHg (SD 3.55). A student T-test was used to compare the change in IOP on both days and was statistically significant with a T-value of −2.25 and P=0.038.

**Conclusion:** Acetazolamide can reduce the rise that occurs in IOP whilst in the Trendelenburg position.

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**0796: HOW TO SET UP AND RUN A CADAVERIC SURGICAL SIMULATION PROGRAMME: EXPERIENCE FROM A UK HAND SURGERY UNIT**

A. Duguid, , L. Bainbridge, M. Arundell. Pulvertaft Hand Centre, Derby, UK.

**Aim:** Cadaveric surgical simulation (CSS) is useful in surgical education. We describe the development of our fresh frozen CSS programme.

**Method:** We performed a systematic evaluation of our CSS programme since 2012, including legal issues, protocols, materials, costs and trainee feedback.

**Results:** 10 CSS courses have been provided free of charge to our fellows. We explain the legality of importing fresh frozen cadaveric specimens, and describe our protocol, developed with the Human Tissue Authority, for storing, using and disposing of cadavers. We describe the source of our specimens with costing and transport details. Our course programme utilises each specimen fully, simulating arthroscopic, soft tissue, bone and joint techniques. We present a description of our cadaveric preparation technique, appropriate instruments and simulation suite.

Our CSS protocol is now mandatory in our Trust, and used by multiple specialties including orthopaedics (upper and lower limb surgery), maxillofacial surgery (flap techniques) and anaesthetics (peripheral block techniques).

37 trainees provided feedback. The mean Likert score was 4.7/5 for educational relevance and impact on future practice.
Conclusions: CSS is a superb resource if utilised properly. We have provided the legal framework and protocols required along with a detailed review of practical considerations to enable successful CSS.

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0290: THE SAFETY, FEASIBILITY AND UTILITY OF 3-DIMENSIONAL C-ARM CONE-BEAM COMPUTED TOMOGRAPHY WITH XPERCT POST-EVAR

R. Limbu, L. Eveson, A. Bajwa, P. Leopold, D. Gerrard, A. Hatrick, J. Taylor, P. Chong. Firmaley Park Hospital, Firmaley, Surrey, UK.

Aim: 3-Dimensional C-arm Cone-beam (CAB) Computed Tomography is emerging as a useful adjunct for quality control during EVAR. We examined the safety, feasibility and utility of a new 3-D CAB, XperCT Allura FD20 system (Philips, Best, The Netherlands).

Methods: All patients in this prospective study underwent conventional post-EVAR uni-planar angiography (CPEA), and additional post-EVAR XperCT on-table. Patients with eGFR<30 ml/min/1.73m2 or previous renal interventions were excluded. We examined the impact of XperCT on additional on-table interventions and the correlation of XperCT observations with the routine 30-day surveillance CTA.

Results: Between April 2010 and July 2013, 51 patients underwent CPEA and XperCT post-EVAR. XperCT detected new findings not identified by CPEA in 9 (17.6%) patients (1 Type1A endoleak, 5 Type2 endoleaks, 3 sub-optimal limbs). Of these 4 (7.8%) underwent further on-table intervention for correctable technical error. Following satisfactory XperCT, 7 (13.7%) patients had new surveillance CTA findings at 30-days (5 new Type2 endoleaks, 2 limb occlusions). Renal function remained unchanged. Median time for XperCT acquisition was 11(6-23) minutes.

Conclusions: XperCT is feasible, safe and maybe a useful adjunct to guide further intervention on-table immediately post-EVAR for quality control but at present 30-day post-EVAR surveillance CTA may not be replaced by XperCT.

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0774: SIMPLE PERIOPERATIVE INTERVENTIONS CAN MINIMISE THE RISK OF PHARYNGOCUTANEOUS FISTULA FOLLOWING TOTAL LARYNGECTOMY – EXPERIENCE AT A SINGLE TERTIARY INSTITUTION

D. Youssef*, S. Vasani, R. Hodge. Royal Brisbane & Women’s Hospital, Brisbane, Australia.

Introduction: Pharyngocutaneous fistula following total laryngectomy contributes to patient morbidity and mortality from prolonged hospitalisation, delayed oral feeding, increased risk of catastrophic vascular haemorrhage and delays to commencement of adjuvant radiotherapy. The experience at our institution has evolved with respect to standardisation of perioperative management of these patients since mid-2013 that has seen a marked reduction in the fistula rate. The changes instituted are simple interventions related to meticulous pharyngeal closure technique, a novel dressing technique and prolonged postoperative metronidazole administration.

Aims: To assess the independent effect of the change of practice on the fistula rate at our institution.

Methods: Here we present a retrospective review of a cohort comprising consecutive patients undergoing total laryngectomy between January 2010 and August 2015.

Results: The total fistula rate was 10 percent in the cohort of 80 patients. A dramatic reduction can be seen comparing the groups before and after the change of practice - 16.3 percent (8/49) versus 0 percent (0/31). The groups are otherwise similar accounting for known predictors including salvage surgery. Here, we present a statistical analysis of the attributable effect of each standardised intervention.

Conclusion: Simple interventions can seemingly reduce the fistula rate in favour of more morbid procedures.

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0543: CT FINDINGS OF SURGICALLY PROVEN INTERNAL HERNIAS POST LAPAROSCOPIC GASTRIC BYPASS (LRYGB) – A RETROSPECTIVE ANALYSIS


Background: Diagnosing internal hernia after gastric bypass is still demanding, even with advanced CT scanning

Methods: Patients who had diagnostic laparoscopy for abdominal pain after LRYGB over the period from 2013-2015 in our institute were included.

Results: Out of 23 patients, 16 patients had IH found during diagnostic laparoscopy. Six (37.5%) of those patients had their Peterson and mesenteric defects closed during primary surgery. Median age at primary procedure was 43years. Median BMI at primary procedure was 46.5kg/m2. The median time of presentation with abdominal pain post bypass was 1.5 years. At the time of the presentation the median excess weight loss was 68% and median BMI 33.3 kg/m2. Commonest sign at CT was “Swirl sign” 7/16 (44%) and “mesenteric oedema” 7/16 (44%). 6/16 (38%) had 2 or more signs while 5/16 (31%) had no signs.

Seven cases of no internal hernia. Even in these patients Swirl sign was present in 3 (43%) and mesenteric oedema in 2 (29%). 3 (43%) had 2 or more of 9 previously documented CT signs pre-operatively. Pre-operatively 3(43%) had no signs at CT.

Conclusion: This study shows that the absence of CT finding should not preclude laparoscopic examination to rule out IH.

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0463: REDUCING THE RISK OF ATRIAL FIBRILLATION AFTER ANATOMICAL LUNG RESECTION


Aims: De novo post-operative atrial fibrillation (POAF) may increase morbidity, hospital stay and healthcare expenditure. This study aims to determine the perioperative factors correlating with POAF and whether these may be modified to reduce its incidence.

Methods: The records of all patients undergoing anatomical lung resection from July-December 2015 were retrospectively reviewed. Patients treated with long-term antiarrhythmic therapy (excluding beta-blockers) or a history of arrhythmia were excluded.

Results: POAF occurred in 13.9% (29/209) of patients at a mean of 3.97 days post-operatively and significantly increased hospital stay (7.0±4.8 vs. 11.5±6.6 days (p=0.0014)). No correlation was found with gender, hypertension or ischaemic heart disease. However, older age (p=0.003, r²=0.04), post-operative infection (p<0.0001; Chi²=15.6) and an open rather than VATS approach (open 20/105 (19.0%); VATS 9/94 (9.6%); p=0.032) were found to be significant uni- and multi-variante predictors of POAF occurrence. Notably, 27.6% (8/27) of patients failed to be cardioverted and remained in AF on discharge, 4 of whom required long-term antiarrhythmic medication.

Conclusions: Increased adoption of VATS procedures reduces the overall incidence of POAF after anatomical lung resections. More rigorous control of modifiable risk factors such as stringent monitoring and early treatment of post-operative infection may further reduce POAF and its associated morbidity.

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0403: NON-OPERATIVE MANAGEMENT OF LOW RECTAL CANCER WITH COMPLETE RESPONSE TO STANDARD NEO-ADJUVANT CHEMO-RADIO- THERAPY (CRT)