Patients had 5-10cm hiatal defects with >50% of stomach in chest. Technique involved meticulous hernial sac dissection, esophageal mobilisation & anterior/posterior hiatal repairs. A 3-4cm tennis-racket shaped gap was created in the centre of mesh which was fixed to the diaphragm, followed by a 180° anterior fundoplication. Validated questionnaire assessed functional outcomes at 6 months*.
Results: Study included 17 patients with female: male ratio of 15:2, age of 74* (69-91) years & ASA 3*. Presentations included dysphasia 12, heartburn 9, chest pain 8 and vomiting 8. 13 and 4 patients underwent elective and emergency procedures respectively. Operative time was 210* (150-240) minutes and hospital stay 2* (1-14) days.
Two patients died (1: multi-organ failure, 1: respiratory failure). Follow up was 12* (3-35) months; one had recurrence while the rest were all asymptomatic with a good quality of life.
Conclusion: Our technique of laparoscopic giant hiatus hernia repair is a challenging but unique procedure with a successful outcome.

0531 **SURGICAL HANDOVER – ARE PATIENTS AT RISK AFTER NIGHT HANDOVER?**
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Introduction: With the European Working Time Directive bringing an increase in shift pattern work, a thorough and complete handover is crucial to patient care and safety. Based on recommendations by the Royal Colleges, this audit aims to quantify the quality of surgical handover.
Method: Over a 6 week period, we prospectively collected data during the surgical night handover detailing aspects of the handover and the information imparted. A satisfaction survey was completed by the receiving team.
Results: 33 handover sessions were audited. 60% of surgeons were "moderately satisfied" with the handover they received. 18% of handovers were considered confidential and 17% of interruptions were urgent. Patient hospital number was documented in 59% of handovers, date of birth in 50%, diagnosis in 50% and patient location in 82%. Mean time spent locating patients post take was 5-10 minutes.
Conclusion: A thorough and accurate handover is a matter of patient safety and integral to the 'Hospital at Night' policy. Our results demonstrate scope for improvement in the quality of handover. Handover must start promptly in a private room with computer access, be registrar-led and designated 'bleep-free'. The finishing shift SHO must ensure all patient details are recorded correctly, and be regularly audited.

0532 **ANALYSIS OF ADHERENCE TO PUBLISHED GUIDELINES FOR VESTIBULAR SCHWANNOMA SCREENING: CORRELATING PUBLISHED GUIDELINES TO DIAGNOSTIC YIELD**
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Background: A Vestibular Schwannoma (VS) is always considered in patients presenting with unilateral or asymmetric otological symptoms. MRI scanning is the definitive investigation for diagnosis. In order to screen more effectively, various guidelines have been published. The existence of the multiple regional protocols reflects the lack of consensus regarding screening.
Aims: 1: Re-audit our adherence to published guidelines; 2: Increase the diagnostic yield of MRIs by identifying combinations of symptoms and signs which have a positive predictive value for VS.
Method: Retrospective analysis of 1000 patients referred for MRI of the Internal Auditory Meatus. Clinical indications for imaging, audiometry results and radiological findings were tabulated. In patients with positive MRI findings, statistical analyses were used to identify combinations of symptoms and signs which had a good predictive value for VS.
Results: 80% of all referrals for MRI screening adhered to Northern regional guidelines. VS was diagnosed in 1.2% of patients. All patients with a diagnosis of VS had audiometrically confirmed asymmetrical hearing loss. No patients with unilateral tinnitus and normal hearing had VS.
Conclusion: This study has closed an audit loop, addressed the merits of adhering to the various regional guidelines and added to the ongoing national discussion.

0534 **THEATRE DELAYS AND THEIR FINANCIAL IMPLICATIONS ON THE NATIONAL HEALTH SERVICE**
Aatif Mahmood, Ahmed F. Bhatti, Sandip Hindocha, Daniel Jordan, Sanjiv K. Dhital, Fahmy S. Fahmy, Ali Juma. *Countess of Chester Hospital, Chester, UK*

Aim: To identify the amount and causes of available theatre time lost and financial implications to the NHS.
Method: Data was collected prospectively between October and December 2010 to estimate number of hours lost in delays and evaluate their causes. The information was collated by the same person in order to reduce ascertainment bias. In addition all members of the staff were blinded to the study.
Results: During the three month period stated, corresponding to total of 175 hours of scheduled theatre time, 43 episodes delays were noted. This resulted in a loss of 21 hours of operative time. This equates to a total loss of 6 operative sessions. Financially this would cost a hospital minimum estimated £16,000 with additional loss of productivity. We found the most common reason for theatre delay was due to a lack of communication between theatre and ward staff.
Conclusion: A significant amount of money can be saved, as well as improved theatre utilisation can be achieved by taking small measures such as enhanced communication between staff, written protocols for pre assessment clinics, which appear trivial but would have a major impact on service efficiency. We present our recommendation in order to enhance this efficiency.

0537 **ANGIOGRAM + PROCEED: A SAFE AND EFFICIENT USE OF RESOURCES IN PERIPHERAL VASCULAR DISEASE**
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Aim: To establish the safety and feasability of using intra-arterial digital subtraction angiography (IA-DSA) as the first line investigation for peripheral vascular disease.
Methods: All patients undergoing angiography in a twelve month period were identified and data collected from the prospective database.
Results: 334 IA-DSA were performed in a twelve-month period, 56 IA-DSA were excluded from further analysis due to alternative first line imaging. Indications for investigation were claudication 99 (35.6%), critical ischaemia 37 (13.3%), Tissue loss/ gangrene 129 (46.4%) and acute limb ischaemia 13 (4.6 %). 101 (37.8%) angiograms were diagnostic only, whilst 177 (62.1%) proceeded to endovascular intervention. Of the patients whose IA-DSA was diagnostic only 51 (53.7%) had subsequent surgical intervention and 6 (5.88%) had a second endovascular procedure.
There were no complications in those patients having a diagnostic angiogram only. In those patients progressing to intervention there were 3 complications. Median time from request to procedure was 3 weeks (1 – 14 weeks) for elective angiography.
Conclusion: IA-DSA is safe as the first line investigation for peripheral vascular disease.with a high proportion of cases progressing to endovascular intervention. By avoiding initial diagnostic tests patients can be treated in a more timely fashion.

0539 **DOES ACADEMIC OUTPUT CORRELATE WITH BETTER MORTALITY RATES IN NHS TRUSTS IN ENGLAND?**
Warren Bennett, Venkat Reddy, Jonathan Bird, Stuart Burrows, Paul Counter. *ENT Department, Royal Devon and Exeter NHS Trust, Exeter, Devon, UK*

Introduction: It has been claimed that institutions engaging in academic activities provide better care. The aim of this study was to establish whether there is an association between academic output and mortality rates for NHS Trusts.

Method: Hospital standardised mortality rates were obtained from the 2010 Dr Foster Hospital Guide. The MEDLINE database of biomedical citations was queried to establish the number of citations credited to each NHS Trust and constituent hospitals from 2006-2010. Admissions totals for NHS Trusts for 2009-2010 were obtained from Hospital Episode Statistics Online. The number of citations per admission was calculated and used as an indicator of academic output as this reflects the workload of the Trust.
Results: Spearman's rank analysis was performed to identify any correlation between citations per admission and the inverse of four types of mortality rates: high-risk conditions r=0.20 (p=0.01); low risk conditions r=-0.06 (p=0.46); deaths after surgery r=0.193 (p=0.019); overall mortality 0.291 (p<0.01).
Conclusion: The results of this preliminary study demonstrate a statistically significant correlation between academic output and mortality rates. However, it should be noted that the correlation coefficients are small, but the findings of this study encourage further debate.

0540 RETROSPECTIVE OBSERVATIONAL STUDY OF RECURRENT FOOD BOLUS IMPACTION OF THE OESOPHAGUS

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Background: Oesophageal food bolus impaction (FB) is usually a one-off event, but recurrence is recognised.
Aims: To establish the recurrence rate of FB and to identify demographic/pathological features associated with FB recurrence.
Methods: Retrospective case note review of patients (≥16years) admitted to the hospital with FB between 2002 and 2007. Patient demographics, co-morbidities, interventions, radiological investigations and results were recorded. Statistical analysis was performed using SPSS 13.
Results: 99 patients fulfilled the inclusion criteria (65 males and 34 females (median ages 59 and 71.5, IQR 47-74 and 53-81 years respectively). 22 patients died between first presentation with FB and the time of this study being conducted (mean follow up 34 months +/-17). 2 patients had recurrences but died before this study. For all other patients without recurrences the mean follow up was 68 months +/-20. Logistic regression demonstrated that only hiatus hernia demonstrated a statistical significance in its association with FB recurrence (OR 4.77 95% CI 1.15-19.82, p=0.032). All other variables (oesophageal pathologies, age and gender of patients) were not statistically significant (all p>0.35).
Conclusion: The recurrence rate of FBI of the oesophagus was 9%. Hiatus hernia was the only oesophageal pathology associated with recurrence of FB.

0541 AUDIT OF FLEXOR POLLICIS LONGUS RUPTURE RATE AFTER REPAIR '08 – '10

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Background: In 2005, Wythenshawe Hospital Hand Surgery Plastic Unit altered the management for patients with a Flexor Pollicis Longus (FPL) rupture from a 2 strands repair to a 4 strands modified Kessler repair.
Purpose: To identify if the new regime has a better rupture rate, and to what extend it affects the functional outcomes.
Methods: A review was undertaken of an historical cohort of 49 patients, who underwent 100% FPL repair in Zone T1 or T2 from 2008 to 2010, comparing to 2003 to 2005 with 130 patients. Total Active Motion is calculated for Strickland Grading (SG) in order to compare the functional outcomes.
Results: The audit has a standard deviation of 2 to 82 years of age with equal gender representation. There was only 1 rupture (2%) after repair in the year 2008 to 2010, but with a higher percentage of delay in surgery. SG shows that functional outcome was poorer in 2008 to 2010.
Discussion: 4 strands repair shows a significant reduction in rupture rate but trading off the functional outcome. However, the poorer SG could be a reflection of higher delay in surgery as delay beyond 48 hours greatly increases adhesion in the area which could affect post-operative functional outcomes.

0542 IMAGING THE UK SURGICAL EMERGENCY

James Read [1], Edward Fitzgerald [1], Rajeshkumar Balasubramanian [2], Musa Barkeji [2]. [1] *Chelsea & Westminster Hospital, London, UK;* [1] *West Middlesex Hospital, London, UK*

Aims: Surgeons place heavy demands on radiologists for abdominal imaging, and radiology departments can struggle to meet these. Trainees in specialities such as O&G, receive formal diagnostic ultrasound training. We investigated radiological experience and opinions regarding introducing such training into surgical curricula.
Methods: Electronic survey distributed to national/regional surgical mailing lists and websites. Questions investigated radiological ability and training of those participating in surgical on-calls.
Results: 141 surgeons responded, including 97 general surgical trainees. 26% were formally trained in interpreting plain films, 12% in diagnostic ultrasound in trauma and 3% in CT reporting. 87% of trainees are present in meetings where radiologists present imaging. 87% felt that more formal radiological teaching should be offered. 63% had used ultrasound to place central lines, 54% to assess bladder volume, and 20% to aspirate breast abscesses. 96% of surgical trainees "often" or "always" review emergency abdominal CT images of their patients. When reviewing these 22% feel confident to diagnose appendicitis, 92% AAA, 76% free air and 57% free pelvic fluid.
Conclusions: There is support for surgical trainees undertaking extended radiological roles. Such training may improve quality of care and provide an efficient and timely pathway for acutely ill surgical patients.

0547 CORRELATION ANALYSIS OF STAIR CLIMBING TEST, ANAEROBIC THRESHOLD IN CARDIOPULMONARY EXERCISE TESTING & LENGTH OF HOSPITAL STAY IN PATIENTS UNDERGOING REPAIR OF ABDOMINAL AORTIC ANEURYSM (AAA)

Junaid Khan, Fayyaz Mazari, George Smith, Nehmiah Samuel, Risha Gohil, Ian Chetter, Peter McCollum. *University of Hull, Hull, UK*

Background: Various parameters are used for evaluation of patients undergoing major vascular surgery. This study analyses the correlation amongst stair climbing test, anaerobic threshold (AT) in cardiopulmonary exercise testing (CPET) & length of hospital stay in patients undergoing Abdominal Aortic Aneurysm (AAA) repair.
Methods: An analysis of prospectively collected data of patients undergoing elective AAA repair. 30 patients [26men, median age 75 years(IQR: 68-78)] were included. All patients underwent pre-operative assessments and were followed up post-operatively for morbidity & mortality. Nonparametric analysis (Spearman rank correlation) was performed for using SPSS v16.0.
Results: Median hospital stay was 7 days(IQR:5-12), post operative complications were observed in 10%(n=3) and mortality rate was 7%(n=2).
Correlation analysis: There was a strong correlation between stair climbing & AT in CPET (r=0.592,P=0.001). However, AT in CPET did not show any significant correlation with length of hospital stay (r=0.032,P=0.872), also no significant correlation was observed between stair climbing test & length of hospital stay (r=0.053,P=0.779).
Conclusion: Stair climbing correlates with AT in CPET in patients undergoing intervention for AAA. Further studies are required to evaluate whether this inexpensive clinical test can be used as a predictor of morbidity and mortality in patients undergoing AAA repair.

0548 ROLE OF PRE-OPERATIVE CARDIOPULMONARY EXERCISE TESTING IN EVALUATION OF OUTCOMES IN PATIENTS UNDERGOING REPAIR OF ABDOMINAL AORTIC ANEURYSM

Junaid Khan, Fayyaz Mazari, George Smith, Nehmiah Samuel, Risha Gohil, Ian Chetter, Peter McCollum. *University of Hull, Hull, UK*

Background: Pre operative risk assessment is important in patients undergoing repair of Abdominal Aortic Aneurysm (AAA). The aim of this