0354: COMPONENTS SEPARATION WITH ONLAY MESH: A SAFE AND EFFECTIVE REPAIR FOR COMPLEX ABDOMINAL WALL HERNIAS. EXPERIENCE WITH 50 CASES AND THE DEVELOPMENT OF A TRIPLE MESH TECHNIQUE

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Introduction: Closing complex major abdominal hernias risks abdominal compartment syndrome. Components separation (CS) allows midline closure in most cases. This poster outlines our experience including postoperative quality of life (QoL) and the evolution of a triple mesh technique.

Method: Retrospective case notes review and structured telephone interview of patients undergoing CS between October 2005 and May 2010 at Derriford Hospital.

Results: 50 patients underwent CS; 41 underwent telephone follow-up (82%). Median follow-up was 29 months (range 3.2 - 57.6). 29 Patients were men; median age was 60 and BMI 33.8 (range 20-48.1). Wound complications affected 16 (32%); the majority settling with conservative management. There was 1 recurrence of original hernia and 2 subsequent parasatal hernias. One patient developed a hernia related to the lateral release. Since developing the triple onlay technique there have been no recurrences. The series has one death related to small bowel ischaemia. 36 (88%) of patients reported improved QoL; (95%) were happy to recommend the procedure to a friend.

Conclusion: CS is associated with low mortality (2%); minimal long term morbidity and improved QoL. Triple mesh technique results in a low recurrence rate. We recommend CS with a triple onlay mesh for repairing complex major abdominal wall defects.

0357: THE ROLE OF PLAIN ABDOMINAL X-RAY IN ACUTE SURGICAL SETTING: A RETROSPECTIVE ANALYSIS

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Introduction: Although the Royal College of Radiologists (RCR) guidelines UK McDonald, Palanichamy Chandran. Luke Stroman, Mohamed Ismat Abdulmajed, Cassandra McDonald outline that plain abdominal x-ray (AXR) should be undertaken in acute abdominal pain, where perforation, obstruction or renal stones is suspected it is possible that plain abdominal x-rays are carried out too frequently in acute surgical admissions. We herein review the diagnostic value of plain abdominal x-ray requested in acute surgical setting.

Methods: We performed a retrospective radiological review of all patients admitted to Surgical Assessment Unit (SAU) at our institution for acute abdominal pain between March 2011 and June 2011.

Results: A total of 116 patients were admitted to SAU complaining of abdominal pain between March 2011 and June 2011. All bad routine AXR for possible obstruction (n=73, 63%), renal colic (n=22, 20%) or other suspected diagnoses (n=31, 27%). Positive or suggestive diagnoses were supported by plain abdominal x-ray from total SAU admissions (n=24, 21%), possible obstruction (n=16, 22%) and possible renal colic (n=5, 22%).

Conclusion: Whilst abdominal x-rays can be used to negatively exclude diagnoses, the fact that vast majority of patients had normal AXR makes the diagnostic role of routine plain abdominal x-ray requested in acute surgical setting questionable.

0372: COMPARISON OF MORTALITY RATES FOR EMERGENCY ADMISSIONS OF GENERAL SURGEONS AND BREAST SURGEONS

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Aim: Many trusts are facing the decision whether to exclude breast surgeons from their general on call surgical rota. This study aims to establish whether there is any difference in mortality rates in emergency surgical admissions between breast and general surgeons.

Methods: Risk Adjusted Mortality Index data was collected from surgeons on the general on call rota in a North Wales Trust over a period of 31 months. Actual and predicted mortalities were compared to give excess death values for breast specialists and their general surgical colleagues. Statistical comparison was performed using the Mann Whitney U test.

Results: Excess deaths for breast, colorectal and upper gastrointestinal were 3.1, -0.4 and -1.3 respectively. The difference in excess deaths between breast and general surgeons were not significantly different.

Conclusion: Although further information needs to be collected, this information suggests that breast surgeons are performing as well as their general surgical colleagues in the on call rota and it may be appropriate for them to remain providing this service.

0426: A PROSPECTIVE ANALYSIS OF SLEEP DEPRIVATION IN SURGICAL PATIENTS

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Aims: Sleep deprivation has a potentially deleterious effect on post-operative recovery. The aims of our study were to identify the factors contributing to post-operative sleep deprivation and to determine the effect of analgesia and night sedation on sleep.

Methods: One hundred consecutive patients attending for elective general and orthopaedic surgery were interviewed preoperatively (baseline) and postoperatively on their duration of sleep, number of awakenings during the night, factors contributing to sleep loss and the use of analgesia and night sedation.

Results: Patients woke up a median of 5 times in the first postoperative night compared to a median of 3 times preoperatively (p<0.01). Pain was the predominant factor preventing sleep, affecting 39% of patients preoperatively and 49% of patients on the first postoperative day. Other factors included noise from other patients and nursing staff, and using the toilet. Analgesia was taken by 80% of patients in the first two days, this number gradually reducing over the postoperative period. Only 5% of patients used night sedation.

Conclusion: Apart from highlighting the need for effective pain management postoperatively, we believe that our study supports the drive towards single bed bays, where steps can be taken to minimize the impact of environmental factors on sleep.

0441: THE USE OF PAIN SCORE OBSERVATIONS TO GUIDE ANALGESIC PRESCRIBING ON SURGICAL WARDS

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Aim: Appropriate analgesia in post-operative patients decreases post-operative complications and leads to faster discharge from hospital. We assessed how pain scores on observations correlated to analgesia prescribing as per our hospital guidelines.

Method: Data was collected from drug charts, patients and ‘VitalPac’ electronic observation software in two prospective samples of inpatients on general surgery, urology and orthopaedic wards.

Results: Two audits, N=65 and N=55, both recorded discrepancy between VitalPac and verbal pain scores (mild/moderate/severe) from patients in 57% and 46%. Incorrect prescribing compared to VitalPac scores in 74% and 60%, but mean 90% of patients were satisfied with their analgesia. Mean 72% of patients’ pain was worse on coughing or movement. Based on Audit 1, nursing staff were educated regarding recording pain scores on movement or coughing, but in only 18% of cases in Audit 2 was this carried out. Conclusion: We have displayed a poor correlation between electronic pain score observations and analgesia prescribing in surgical patients. Despite this the majority of patients are satisfied with pain relief. Pain scores observations are more significant if recorded accurately in the context of movement and coughing, and can be a useful guideline for alerting medical staff to inadequate analgesia.

0488: SURGICAL HANDOVER AUDIT 2011: AN AUDIT OF HANDOVER PRACTICE IN A SURGICAL DEPARTMENT IN LONDON AGAINST THE STANDARDS SET BY THE ROYAL COLLEGE OF SURGEONS OF ENGLAND

Peter Labib, Charles Craddock, Pranav Somaiya, Gabriel Sayer. Queen’s Hospital, Romford, London, UK

Aim: Since the European Working Time Directive was introduced, emphasis has been drawn to handover practice. The Royal College of Surgeons of England published a guideline on safe handover practice to identify key aspects required for safe and effective handover. Our aim was to assess handover practice in our surgical department against these standards.

Method: Between 27th October and 13th November 2011, handovers were observed and marked against the above guidelines.
Results: 31 handovers were audited. 45% of handovers had a delayed start, the most common reasons being an unprepared list or team members being late. Handover attendance was poor for nursing staff and consultants. Electronic handover was always used. Of the 283 patients on the lists, data recording was good for name, date of birth, admission date, ward, diagnosis, treatment plan and outstanding tasks. Recording was substantial for results, if review was required, clinical status and patient bed space.

Conclusions: The guidelines were being achieved in many key aspects of handover (thanks largely to the electronic handover system). However, areas requiring improvement include start time, nursing attendance and recording of patient bed and clinical status. We recommend that there is a handover start bleep reminder and that nursing staff and consultants attend handover.

0489: THE USE OF GUIDELINES TO RATIONALISE BLOOD TESTS ON EMERGENCY SURGICAL PATIENTS
Peter Adam Rees, Fraser Moss, Michael Marsden. Stepping Hill Hospital, Stockport, Cheshire, UK

Aim: Most emergency general surgical patients have blood tests performed on admission with no published evidence on the subject. This study aimed to identify blood tests frequently performed inappropriately and tests often missed, and to create and evaluate the potential impact of guidelines.

Methods: A representative group of general surgical emergency admissions over 3 months were randomly selected and retrospectively analysed. Data collected included presenting complaint, blood tests on admission, and presence of diabetes, jaundice, anticoagulation and haemodynamic instability. A novel guideline was applied and comparison made between predicted and actual blood tests performed.

Results: Total of 121 cases (67 female, 54 male, median age 65; range 17–101 years). 10/121 (8%) were outside the remit of the proposed guideline. Only 28/111 (25%) adhered to proposed guideline. CRP and amylase (68/107 and 88/107, actual vs predicted) were frequently missed, while an excess of coagulation screens and group and saves were performed (42/21 and 51/36, actual vs predicted). Strict adherence to the guideline would have resulted in a saving of £2.99 per patient.

Conclusion: Many unnecessary blood tests are performed while others are missed. The introduction of guidelines could lead to significant savings when applied to all patients.

0536: DAY SURGERY PERFORMANCE: USING SIMPLE, COST NEUTRAL MEASURES TO IMPROVE CLINICAL AND FINANCIAL PRODUCTIVITY


Productive Day Surgery units can help provide efficiencies needed to modernise the NHS in a challenging financial climate. This study set out to improve DS performance in an Acute Trust after audit results highlighted inefficiencies in 2008.

From 2008 - 2010, data was collected at a single DS unit. Booking efficiency (% of list booked), theatre efficiency (% of theatre time used), patient attendances, cancellations and case volume were measured. A lead surgeon, anaesthetist, nurse and manager established a DS improvement Steering group. Novel scheduling and booking programmes were developed, and new managers recruited in a cost neutral framework. Efficient practice was cemented into the work culture through clinician engagement.

Booking efficiency improved from 59.9% to 79.9%, and theatre efficiency improved from 64.6% to 78.4%. Case volume increased by 17% over the first 6 months. DNA/cancellation rate fell from 21% to 5%. Global DS unit performance increased from 145th out of 166 units in 2008 to 66th in 2010, and revenue generation rose by more than £281,000.

Improvement of DS performance can play a central role in delivering mandated DH efficiency savings. Multidisciplinary working engineered sizeable efficiency and financial gains in a cost neutral framework.

0555: CAN THE MODE OF ANAESTHESIA INFLUENCE THE READMISSION RATE FOLLOWING ELECTIVE HERNIA REPAIR?

Neena Randhawa, Rory Johnston, Timothy Rowlands. Royal Derby Hospital, Derby, UK

Aim: To assess if the mode of anaesthesia used for elective hernia repair influences readmission following successful discharge from day surgery.

Method: Retrospective case note review of 100 consecutive patients (June 2010 – December 2011) who underwent elective hernia repair performed by a single consultant.

Results: Average age was 55 years (19-79), with 89 males and 11 females. 46% of patients had right and 40% underwent left inguinal hernia repair. The remaining 14% were: 5% bilateral, 4% femoral, 4% umbilical and 1% epigastric hernia repair. Of 100 patients, 87% had general anaesthetic, 9% spinal and 4% local anaesthetic. Six patients were readmitted, all had the procedure under general anaesthetic; of these, four were for pain management, one for wound infection and one for scrotal haematoma. The patient with scrotal haematoma was admitted for 2 days but the rest were successfully discharged within 24 hours.

Conclusion: Inadequate analgesia post-operatively was the main factor for readmission in our study. Small sample size has provided limited information but with a recent change in the consultant’s practice to perform procedures under local/regional anaesthesia, further study would look to compare the factors for readmission.

0558: ARE MODIFIED EARLY WARNING SCORES RECORDED CORRECTLY IN SURGICAL PATIENTS?

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Background /Aims: Modified early warning scores (MEWS) have been shown to correlate well with transfer to HDU/ITU, length of stay and inpatient mortality. We aimed to establish whether MEWS were being recorded and acted upon in accordance with Trust and NICE guidance.

Methods: Surgical in-patients (n=71) were audited over a 24 hour period for MEWS, including accuracy of calculation, frequency of recording, request for review and timing of review. The results guided re-education and implementation of changes. Subsequently, we re-audited (n=67).

Results: The percentage of patients with incorrectly calculated MEWS was 22% compared with 3% after re-education (p<0.0001). The percentage of missing MEWS was initially 39% compared with 14% after re-education (p<0.0001), with the majority of missing scores occurring between 11PM and 8AM (53%). In 60% patients a review was not asked for following MEWS triggering, compared with 14% following re-education (p<0.05). Of those MEWS that triggered, only 40% adhered to the correct timing of review (<30 minutes) compared with 71% on re-education.

Conclusions: Re-education and organisational changes improved MEWS, but the level of accuracy remained unsatisfactory. Further education and the use of hand-held digital accessories may be required.

0643: ARE SERUM BILIRUBIN LEVELS USEFUL IN DISCRIMINATING BETWEEN PERFORATED AND NON PERFORATED APPENDICITIS?

Sanjay Harrison, Firoozeh Salimi, Shekar Rangaiah, Omar Nugret. Friarage Hospital, Northallerton, UK

Aim: To assess is serum bilirubin levels can be used to differentiate between perforated and non perforated appendicitis

Methods: A retrospective study of appendicectomies (n=188) performed in two different hospitals from March 2011 to September 2011 was performed. The cases were divided according to histology as normal, inflamed and perforated. Pre operative measurements of serum bilirubin, white cell count and CRP levels were compared between the three groups using a one way analysis of variance.

Results: No significant difference in the mean serum bilirubin levels between the inflamed and perforated groups was noted (p=0.1). Mean serum bilirubin levels were found to be significantly lower in the normal group when compared to the inflamed (p=0.02) and perforated groups (p=0.001). Mean CRP levels were significantly higher in the perforated group when compared to the normal (p=0.005) and inflamed (p=0.005) groups. White cell counts were also significantly higher (p=0.005) but there was no significant difference between the inflamed and perforated groups.

Conclusions: While hyperbilirubinaemia is suggestive of appendicitis in conjunction with the clinical presentation, it cannot be used to