insertion of foreign body only. Admitting clinicians frequently have their requests questioned by diagnostic radiographers regarding their suitability. This study assessed if clinicians undertake “gaming behaviour” by fabricating clinical information to get the test they desire, rather than what is indicated.

**Method:** 50 random AXRs performed in October 2015 in our institution were selected from a PACS search. The notes were then retrieved, and written clinical and ICE request information was assessed for congruency. It was also noted if the AXR was normal or showed pathology and the clinical background of the requestor.

**Result:** 42% of AXRs had ICE request information that was either an elaboration or complete fabrication from the clinical history and examination. 80% of these produced a normal AXR. The majority were requested by an A&E clinician.

**Conclusion:** There is a significant overuse of AXR in the Acute Abdomen by clinicians fabricating information to “get through the system”. They can be reassured that this imaging is indeed unnecessary as indicated by RCR guidance.

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**0732: DOES CT SCAN CHANGE THE MANAGEMENT OF PATIENTS AGED OVER 50 WHO PRESENT WITH SUSPECTED APPENDICITIS?**

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**Aim:** to determine whether routine requests for CT abdomen/pelvis alter management of patients over the age of 50 presenting with a clinical picture of acute appendicitis during their work-up.

**Method:** retrospective study. Records of patients meeting inclusion criteria were retrieved from acute surgical handover electronic records. CT scan findings were compared to clinical diagnosis. Proportion of patients who did not undergo a standard appendicectomy was calculated.

**Result:** 25 patients included. 8 female, 17 male, ages 50-85, median age 61 years. 4 patients did not have a CT scan, 21 were scanned. Of those that were scanned, 5 (23.8%) did not have an operation because of CT scan findings differing from clinical suspicion. Of those, 3 had alternative diagnoses, 1 had an appendix mass which was percutaneously drained, whilst another had a suspected caecal tumour with secondary appendicitis, but not fit for surgery. Of the 4 not scanned, all underwent a laparoscopy - 3 appendicitis and 1 showed caecal thickening with a normal appendix (not removed).

**Conclusion:** CT scan changed the management of 20% of the patients as they did not require an appendicectomy. Of the few that were not scanned, one of them had an alternative pathology requiring further investigation.

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**0806: ASSESSING DISTRACTION OF UNSTABLE CERVICAL SPINE FRACTURES WITH INCORRECTLY FITTED RIGID COLLARS - A CADEVERIC STUDY**

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**Aim:** Rigid collars need to be properly sized prior to placement on patients with cervical spine fractures. There has been no study to date looking at the degree of fracture distraction when a wrongly sized collar is used.

**Method:** The integrity of the cadavers’ cervical spine were disrupted using a variety of techniques and access points (trans oral, trans foraminal magnam and posterior neck approach). The fracture patterns assessed included involvement of two or three columns (C1 burst fracture, occipito-atlas dislocation, rupture of the atlas transverse ligament and odontoid peg fracture). The standard three view (anterior-posterior, lateral and odontoid peg) plain radiographs were performed on these cadavers with cervical hard collars fitted into different positions (no neck, short, regular and tall).

**Result:** The plain radiograph images had been degraded by artefact created by air entering the soft tissues (spinal canal and posterior neck) during dissection. There were no significant changes in the fractured segments when the rigid collar was placed in any position.

**Conclusion:** Incorrectly fitted hard collars did not worsen the fracture pattern of unstable cervical fractures. There are limitations to this study based on the air artefact created when making a fracture.

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**0810: MANAGEMENT OF PENETRATING CHEST INJURIES AT A MAJOR TRAUMA CENTRE WITH AN OFF-SITE CARDIOTHORACIC HOSPITAL**

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**Aim:** To evaluate the management of penetrating chest injuries at a major trauma centre with an off-site cardiothoracic hospital 20 minutes away. It was hoped that identification of best practice would lead to the development of a protocol to standardise management and improve outcomes.

**Method:** Data was collected retrospectively from all penetrating chest trauma admissions to Aintree University Hospital, Liverpool between August 2014 and July 2015. Cases were included if they fulfilled the Trauma Audit and Research Network (TARN) criteria for a major trauma. Electronic records from each admission, including prehospital and operative notes, were analysed to complete data points.

**Result:** In total, 21 out of 92 patients admitted with penetrating thoracic injuries fulfilled TARN criteria for inclusion. Of these, six required a thoracotomy. Four underwent thoracotomy on-site, one of whom was later transferred off-site for further thoracotomy. Each patient who underwent thoracotomy on-site survived to discharge.

**Conclusion:** The heterogeneity within penetrating chest trauma cases is a major obstacle to standardising their management. On-site cardiothoracic expertise is required at the time of admission for patients that may need thoracotomy, as transfer off site is often impossible. Development of a centre-specific protocol can guide and streamline management if implemented effectively.

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**0814: EMERGENCY ABDOMINAL ARTERIAL HEMORRHAGE: MULTI-PHASE CT APPEARANCES AND THE ROLE OF THE INTERVENTIONAL RADIOLOGIST**

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**Aim:** One of the most preventable causes of death in abdominal and pelvic trauma is arterial hemorrhage that goes untreated or unrecognized. Over the last decade, radiology has undergone many advances, particularly in noninvasive imaging and interventional angiography, such that critical arterial hemorrhage is both recognized and treated faster, often with life-preserving results

**Method:** We collated a series of cases that demonstrate the appearances of arterial hemorrhage on multiphase CT. We highlight the important features and pitfalls that the surgeon should recognize on imaging. We discuss how involving the Interventional Radiologist at an early stage can improve patient mortality in these critical cases without the need for emergency surgery. Pre-surgical embolization to achieve hemostasis in some cases can postpone surgical intervention and also dramatically reduce intra-operative bleeding.

**Conclusion:** The role of the IR is becoming increasingly important, not only in emergency hemostasis but also in stabilization for later surgery. Surgeons need to be aware of this important resource and be acquainted with the CT imaging appearances.

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**0820: CLINICAL OUTCOMES OF EMERGENCY HARTMANN’S PROCEDURE**

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**Aim**: We evaluated the morbidity, mortality and reversal rates of emergency Hartmann’s procedure.

**Method**: This was a retrospective study of 104 consecutive patients operated on at our institution between January 2010 and June 2014.

**Result**: The most common diagnosis was diverticular perforation (68.65%), followed by cancer (24.23%). The most common complications were intra-abdominal collection (19%), wound infection (19%) and hospital acquired pneumonia/HAP (18%). 3 patients returned to theatre for stoma revisions, 26 required image guided interventions. 4 patients required TPN and 2 patients were re-admitted to ITU. 9 (8.6%) patients died during their initial admission and 2 within 90 days after surgery, both from metastatic disease. Of 92 patients who had a discussion with a colorectal surgeon regarding the option of reversal only 15 had their stomas reversed.

**Conclusion**: The postoperative in hospital mortality rate after emergency Hartmann’s procedure was 9%. The most common complications were intra-abdominal collections, HAP and wound infections. Re-operation rate was low. The low reversal rate of 14% appears to be at odds with those previously quoted in the literature (23 - 45%). Reversal was more likely in male patients, those of younger age, with a low BMI, and those with a benign disease.

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**0884: HIGHER OPERATIVE MORTALITIES ARE ASSOCIATED WITH LAPAROTOMY, BOWEL RESECTION AND STOMA FORMATION IN EMERGENCY SURGICAL ADMISSIONS**

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**Aim**: To determine operative mortality in our trust over different surgical cohorts.

**Method**: Analysis of mortality in emergency admissions between January 2008 and 2014. Categorised according to operative versus non-operative, laparotomy versus laparoscopy, small bowel and colonic resection versus nil and stoma versus no stoma.

**Result**: 40,389 emergency admissions to general surgery with an operative cohort of 8501 (21.0%). Of these, 1566 (18.4%) underwent a laparotomy versus 3302 (38.8%) laparoscopic procedures. A small bowel or colonic resection was performed in 1105 (13.0%) of the operative cohort. A stoma was formed during laparotomy in 441 (28.2%) cases. It was shown that emergency surgery necessitating laparotomy, small bowel or colonic resection and stoma formation is associated with the highest level of 30-day mortality (6.19%, 3.6% and 8.1% respectively) and 1-year mortality (16.1%, 12.1% and 25.4% respectively). Laparoscopic, no resection and no stoma surgeries had lower 30-day mortality rates (0.48%, 1.5% and 5.4% respectively) and 1-year mortality rates (1.9%, 5.2% and 12.9%).

**Conclusion**: Emergency surgery necessitating laparotomy, resection and stoma formation is associated with the highest levels of mortality at 30-days and 1-year. The above factors should be discussed with patient before obtaining consent. Further analysis is required on sepsis, age and neoplasm.

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**0913: IMPROVING THE CARE OF EMERGENCY LAPAROTOMY PATIENTS: MINIMISING DELAYS RELATED TO OBTAINING RADIOLGICAL INVESTIGATIONS**

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**Aim**: Imaging is commonplace before emergency laparotomy. The EPOCH trial is developing peri-operative care pathways. Our aim was to assess performance against EPOCH’s standard for obtaining CT imaging (<2 hours of decision) and identify potential improvements.

**Method**: An audit of emergency laparotomy patients was performed by recording timings: admission, decision, scanning and reporting. The results were distributed via departmental meetings and email. Discussions with the radiology department were initiated. To assess for change, we repeated the audit.

**Result**: There were 18 and 23 patients in cycles 1 and 2 accordingly. In cycle 1, the decision-to-scanning interval was <2 hours in 10/18 (55.56%) and <6 hours in 17/18 (94.44%), compared to <2 hours in 14/23 (60.86%) and <6 hours in 22/23 (95.65%) in cycle 2. In cycle 1, the decision-to-reporting interval was <2 hours in 4/18 (22.22%) and <6 hours in 17/18 (94.4%). In cycle 2, this was <2 hours in 3/23 (13.04%) and <6 hours in 18/23 (78.26%). The median decision-to-scanning and decision-to-reporting intervals improved from 101 and 212 minutes to 101 and 180 minutes respectively.

**Conclusion**: We demonstrated improvement following intervention. Further work is needed to minimise the delays. Developments in peri-operative care pathways will improve patient outcomes.

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**0921: OUTCOMES AFTER EMERGENCY LAPAROTOMY AT A SECONDARY LEVEL HOSPITAL IN RURAL ZAMBIA**

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**Introduction**: Prompt laparotomy can be life-saving but the procedure itself is inherently dangerous. These risks are amplified in a resource poor setting so this study aimed to explore the outcomes of emergency laparotomy at Saint Francis’ Hospital, Zambia.

**Method**: All patients who underwent emergency laparotomy for an acute abdomen at Saint Francis’ Hospital between February 2012 and December 2014 were included. A proforma was designed to gather data retrospectively using patient notes. The primary outcome measure was in-hospital mortality. Secondary outcomes measures were the incidence of in-hospital complications, classified using the Clavien-Dindo system, indication for surgery and cause of death.

**Result**: During the study period 239 patients underwent laparotomy for an acute surgical indication. In-hospital mortality was 12.6% (n=30) with the commonest cause recorded as ‘cardiopulmonary collapse’ (n=12) followed by sepsis (n=7). A further 70 patients survived in-hospital complications: grade 1 (n=32), grade 2 (n=29), grade 3 (n=9). No patients survived a grade 4 complication.

**Conclusion**: When compared with the incidence of other complications the mortality rate was high. The absence of any patients surviving organ failure (grade 4 complication) can be explained by the limited intensive care facilities. Changes in postoperative management could contribute to a reduction in mortality.

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**0940: DOES THE IMPLEMENTATION OF A PREOPERATIVE BOOKING CARD INCREASE COMPLIANCE WITH ADMINISTRATION OF ANTIBIOTICS IN SEPTIC PATIENTS UNDERGOING EMERGENCY LAPAROTOMY SURGERY AT EAST LANCASHIRE HOSPITAL TRUST (ELHT)?**

O. Greenham*, D. Subar. Royal Blackburn Hospital, Lancashire, UK.

**Aim**: To identify if a preoperative booking card for septic patients undergoing emergency laparotomies promotes administration of antibiotic in accordance with hospital sepsis guidelines. These state antibiotics must be administered within three hours of diagnosis. Booking cards have been shown to significantly reduce morbidity and mortality in emergency laparotomy patients.

**Method**: A retrospective audit was undertaken over a 10-month period using a hospital database to identify septic patients who underwent emergency laparotomies and to identify if booking cards were completed. Patient clinical notes were used to identify timings of sepsis diagnosis and administration of antibiotics.

**Result**: 36 patients were identified with complete data, of which 15 (41.7%) had booking cards. All patients (100%) received antibiotics prior to completion of a booking card. Time from sepsis diagnosis to