reduction in weekend mortality should not be a driver for seven day working for doctors.

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0308: SYSTEMATIC REVIEW AND META-ANALYSIS OF PROGNOSTIC VALUE OF CIRCULATING TUMOUR CELLS (CTC) IN EARLY BREAST CANCER

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Aim: Prognostic value of circulating tumour cells (CTC) in breast cancer is currently under investigation. This systematic review with meta-analysis aimed to measure the evidence on prognostic relevance of CTC in early breast cancer presented in recent published studies.

Method: A detailed search was made for published primary studies of the prognostic value of CTC in early breast cancer. After review and quality assessment, 22 studies with data on CTC status and disease recurrence and breast cancer mortality, were included. Primary outcomes analysed were hazard ratios for disease-free survival (DFS) and overall survival (OS) between the patient groups with positive and negative detection of CTC. Meta-analysis calculated the pooled hazard ratio (HR) with 95% confidence intervals (CIs) as the overall effect measure on DFS and OS using fixed and random effects models.

Results: 22 studies enrolling total of 5724 patients were eligible for the systematic review and meta-analysis. The pooled HR for DFS and OS for CTC positive status were 2.81 (CI: 2.20-3.61) and 2.74 (CI: 2.20-3.41) respectively.

Conclusion: This review and meta-analysis found that the presence of CTC in early breast cancer was associated with a nearly 3 fold greater hazard of recurrence and death compared with non-detection.

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0836: SURGERY FOR INFANTILE HYPERTROPHIC PYLORIC STENOSIS: A TEN YEAR NATIONAL COHORT STUDY

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Aims: Assess trends in: (i) epidemiology of infantile hypertrophic pyloric stenosis (IHPS); and (ii) service provision of pyloromyotomy in England.

Methods: Hospital Episode Statistics (HES) data were used to analyse all IHPS admissions in England 2002-2011. Office for National Statistics provided birth rates. Data are presented as median (IQR).

Results: 9686 infants (83% male) underwent pyloromyotomy. Age was most common 29-90 days (n=6563, 67.8%), then 7-28 days (n=2945, 30.4%). Annual incidence was approximately static at 1.5/1000 live-births. Surgery was performed in 22 specialist (SpCen) and 39 non-specialist (NonSpCen) centres. The proportion treated in SpCen increased linearly by 0.4%/year (r=0.76, p=0.01, slope 0.43 [0.12-0.73]). 6221 (64%) infants were transferred to SpCen for surgery. Annual case-volume in SpCen vs. Non-SpCen was 46 (24-53) vs. 1 (0-3). The highest volume SpCen performed 85/year (73-117) vs. 11/year (9-15) NonSpCen. 17/39 (44%) NonSpCen averaged less than one/year; 4/39 (11%) greater than five/year. The steady increase in laparoscopic surgery reached 20-23% 2009-2011: significantly more were laparoscopic in SpCen (11% vs. 1%, p=0.000, OR 12.31 [5.83-25.98]).

Conclusions: IHPS incidence appears lower than previously reported. The low procedural incidence in NonSpCen would appear to be contrary to NCEPOD guidance. Initial adoption of laparoscopic pyloromyotomy has plateaued.

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1349: ZERO ISCHAEMIA OPEN PARTIAL NEPHRECTOMY: A SUITABLE ALTERNATIVE TO THE MINIMALLY INVASIVE APPROACH

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Aim: Open partial nephrectomy has evolved over time from an open technique to minimal access approaches including laparoscopic and robotic. Our minimal access open technique includes stenting all patients and a supra 12th-6cm mini-flank incision without renal artery ischaemia.

Methods: A prospectively populated database of a single surgeon was analysed. 71 patients underwent a partial nephrectomy over a 6 years. Data for operative time, blood loss, change in renal function, complications, histopathology and RENAL nephrometry was analysed.

Results: A single surgeon performed 71 partial nephrectomies over a 6 year period. Mean operative time was 72 minutes. Mean estimated blood loss was 608 mls with one patient receiving a blood transfusion. The mean pre and post-operative haemoglobin levels were 144 and 112 g/l. The mean pre and post-operative creatinine levels were 82 and 103 Umol/L. Overall complication rates were comparable with the BAUS audit. There were 8 Grade 2 (Clavien-Dindo) complications and 1 major complication (Clavien IIIa). Median follow up was 38 months with no local recurrence or progression of disease in 5 patients having a positive margin (7%).

Conclusion: Our results demonstrate than an open partial nephrectomy with a mini-incision has satisfactory outcomes relative to the BAUS audit data.

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0277: PHARMACOLOGICAL MANAGEMENT TO PREVENT ILEUS IN MAJOR ABDOMINAL SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Aim: Prolonged ileus is a common complication following gastrointestinal surgery, with an incidence of up to 40%. Investigations examining pharmacological treatment of ileus have proved largely disappointing; however, recently several compounds have been shown to have benefit when used as prophylaxis to prevent ileus.

Objective: This review aimed to evaluate the safety and efficacy of compounds which have been recently developed or repurposed to reduce bowel recovery time, thereby preventing ileus.

Data sources: A systematic review of the MEDLINE, EMBASE and Cochrane Library in addition to manual searching of reference lists up to April 2015.

Results: A total of twenty-one studies were included in the final analysis. The µ-opioid receptor antagonist Alvimopan and serotonin receptor agonists appeared to significantly shorten the duration of ileus. The use of Ghrelin receptor agonists did not appear to have any effect in five trials. No publication bias was detected.

Conclusions: There is evidence to make a strong recommendation for the use of Alvimopan in major gastrointestinal surgery to reduce postoperative ileus. Further randomized trials are required to establish whether serotonin receptor agonists are of use. Identifying a low-cost compound to promote bowel recovery following surgery could reduce complications and shorten duration of hospital admissions.

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1105: TRAINEE APPENDICECTOMIES - IS AN INTEGRATED ‘CEPOD OTA’ BENEFICIAL FOR SHO’S?

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Aims: Although appendicectomies were previously regarded as a routine procedure for junior trainees, they are increasingly performed by more senior trainees [2]. Nevertheless, progression to higher surgical training in General Surgery is partly dependent on competence in index procedures such as appendicectomies.

Methods: We retrospectively analysed records of 221 appendicectomies performed between October 2014 and October 2015 in a hospital with a dedicated week attached to the CEPOD team, integrated into the general
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 tonsillitis rose by almost 3 folds (Pearson’s r = 0.968). The rate of admission for peritonsillar abscesses rose by 48% (r = 0.857) and retro/parapharyngeal abscess admission have also been rising (r = 0.709). The amount of tonsillotony performed per 100,000 population remained almost the same (r = 0.16).

There is a positive correlation between amount of tonsillotomy 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 tonsillitis to the amount of tonsillotomy 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 tonsillotomy 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 2, 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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### 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.