

We audited our preoperative maintenance fluid prescribing against the guideline.

Methods: 20 patients aged 18–65, operated on in February 2014 were randomly selected. Exclusion criteria: Complex fluid requirements/significant co-morbidities (renal impairment, shock, sepsis). Notes were examined documenting weights and fluids prescribed since being made NBM. The quantity of water & electrolytes prescribed was calculated. Weights were used to calculate the 'ideal' amount of each component according to the guideline and time frame. A fluid 'flashcard' was produced to guide the prescribing. We re-audited in August 2014

Results: Initial audit demonstrated on average (mean) patients were prescribed 19.7% of the recommended potassium & 11.5% of glucose however 519.2% of sodium, 459.3% chloride and 155.9% of water. The re-audit showed improvements with increases in potassium and glucose prescribed, 31.9% and 62.3% respectively and decreases in sodium 450.5% and Chloride 423.3%. Water 157%.

Conclusion: This audit shows that further education is required. Our flashcard made improvements. Further dissemination & incorporation into a hospital protocol would be the ideal next step.

0730: THE SURGICAL ASSESSMENT UNIT: A SOLUTION TO EMERGENCY WAITING TIMES?

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Aim: Surgical Assessment Units for direct admission of selected patients from emergency departments and general practitioners facilitate expeditious assessment and definitive management of "short-stay" patients (length of stay anticipated to be less than 48 hours). This pilot study assesses the need for an SAU in a busy London district general hospital.

Methods: A retrospective study of acute general and vascular surgery admissions over 4 days at Croydon University Hospital evaluated: i) proportion of admissions whose initial assessment was predictive of length of stay less than 48 hours; ii) time from ED attendance to surgical assessment

Results: Of 30 admissions, 7% were seen within 1 hour of attendance and 63% within 4 h (mean = 5h18m). Eleven patients (37%) met criteria for SAU admission, of which 54% actually stayed less than 48 h.

Conclusion: RCS guidelines necessitate surgical review within one hour. A functional SAU and associated pathway will greatly improve performance in this domain, also expediting senior review and initial and definitive management. Clearly defined criteria are essential to accurately identify patients for the short-stay pathway, ensuring appropriate utilisation of the SAU. Having created a modernised pathway, the SAU at Croydon University Hospital opens in mid-January; key outcomes will be audited.

0753: THE MANAGEMENT OF ACUTE URINARY RETENTION IN A DISTRICT GENERAL HOSPITAL (DGH) EMERGENCY DEPARTMENT: HOW SAFE AND EFFECTIVE IS OUR CURRENT PRACTICE?

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Aim: Acute urinary retention (AUR) is a common presentation in the Emergency Department (ED) however; there is still much ambiguity over its handling. This audit study aimed to assess the current quality of AUR management in a DGH for the purposes of service improvement and patient experience.

Methods: Retrospective data from all patients diagnosed with AUR over a 4 month period (n=69) were collected and standardised against the new 2013 Clinical Emergency Medicine (CEM) standards for urinary retention management.

Results: Using short-term polytetrafluoroethylene (PTFE) catheters, 20(29%) patients were catheterised within one hour of admission and only 39(57%) within two hours. 20(29%) did not receive adequate pain management as per CEM standards. We revealed 62(90%) patients warranting ward admission required switching to a long-term silicone catheter as an inpatient before discharge. This yielded a loss of £59.52 to the Trust owing to potentially avoidable repeated catheterisation procedures.

Conclusion: Our study demonstrated shortcomings in the emergency department's management of AUR. Additionally, the significant requirement for inpatient re-catheterisations highlighted economic pitfalls and

areas intrusion on patient safety and experience. This has prompted the stocking of long-term silicone catheters in the ED as stipulated by the new trust guidelines.

0787: PATIENT SAFETY: PARENTERAL FEEDING AND PATIENT POSITION

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Aim: An alarmingly high proportion of patients are in the supine position while on a parenteral feed (PEG, NG etc.), this leads to increased susceptibility of patients to aspiration and aspirational pneumonia.

The proposed solution is a clear and concise poster placed on the bedside of all patients who are parenterally fed, this will act as a reminder to all of the multidisciplinary team to ensure these patients are in the correct position, particularly ensuring repositioning after adjustment for procedures. Our aim was to investigate the effectiveness of a bedside poster in ensuring the correct positioning of patients on parenteral feeds.

Methods: The poster solution was implemented in the hospital and the percentage of patients in the incorrect position before and after the introduction of the poster was compared.

Results: 40% of patients in the cohort audited were in the (incorrect) supine position while on a parenteral feed; this was reduced to just 5% after the implementation of the poster.

Conclusion: Following the introduction of the bedside poster the percentage of parenterally fed patients in the incorrect position was significantly reduced. This may have a significant impact on patient safety through reduced risk of aspiration and aspirational pneumonia.

0814: THE EFFICACY OF THE COOK-SWARTZ IMPLANTABLE DOPPLER IN THE DETECTION OF FREE FLAP COMPROMISE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Aim: Reducing free flap failure rates is a key goal of any microsurgical unit. The Cook-Swartz implantable Doppler can be used to monitor flap vascularity. We conducted a systematic review and meta-analysis to compare the efficacy of the Cook-Swartz implantable Doppler with clinical monitoring to prevent flap failure.

Methods: A comprehensive literature search was carried out using MEDLINE, EMBASE, PsycINFO, Ebsco, The Cochrane Library, CINAHL, SCOPUS, SciELO, NHS evidence and online clinical trial registers from 1966 until 11th April 2014. Studies comparing flap failure rates in Cook-Swartz implantable Doppler and clinically monitored groups were considered. Screening and data extraction was performed by two independent researchers.

Conclusion: Seven articles met the inclusion criteria, involving 3,280 patients and 3,304 flaps. The average failure rate in the clinical group was 3.50% and in the Doppler group was 2.0%. A fixed effects meta-analysis was performed and found a reduced failure rate with the use of the Doppler (OR 0.37, [0.21–0.64], p=0.0005).

Conclusions: The Cook-Swartz Doppler has the potential to be a useful adjunct to clinical monitoring of free flaps. Further research is needed to confirm its benefits and refine its indications to optimise cost-effectiveness.

0818: LEVELS OF EVIDENCE IN PLASTIC SURGERY – TRENDS AND COMPARISON WITH FIVE OTHER SURGICAL SPECIALTIES

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Aim: Categorising research by level of evidence (LEV) is a key evidence-based medicine (EBM) initiative within surgery. Our objective was to

assess how the LEV in Plastic Surgery has changed from 2003 to 2013, compared with five other specialties.

Methods: Articles in 2003 and 2013 of the top three general plastic surgery journals (by 2013 Impact Factor-IF) were systematically labeled as LEV 1–5, defined by the American Society of Plastic Surgeons. Comparisons were made with five other surgical specialties.

Results: The mean LEV for plastic surgery improved by 4.1% from 3.86 to 3.70 in 2003 to 2013. Journals representing all six specialties included in this study have improved their mean LEV (range 3.7%–10.9%). Plastic Surgery ranks 5/6 of specialties in order of the mean LEV achieved in both 2003 and 2013. All specialties reduced the proportion of level five evidence published. There was a slight trend towards higher LEV with higher weighted or mean IF but this did not reach significance ($p=0.065$ and 0.079 respectively).

Conclusion: Plastic Surgery is tending towards higher levels of evidence albeit at a slow pace. The specialty must continue to drive towards higher LEV to improve the corpora of research for evidence-based decision-making.

0824: THE NEED FOR CORE OUTCOME REPORTING IN AUTOLOGOUS FAT GRAFTING FOR BREAST RECONSTRUCTION

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Aim: There is growing interest in the potential of autologous fat grafting (AFG) for breast reconstruction. This follow-on work from our recent systematic review of this area looks at the range of outcomes used, their definition and whether there is a need for a core outcome set to aid reporting.

Methods: Following on from prior work involving a search of 20 databases from 1986 to March 2014, 35 studies meeting the inclusion criteria for our systematic review were assessed.

Results: A total of 51 different outcomes were reported across the 35 studies. Each study reported a median of 5 separate outcomes (range 2–14), of which a median of 3 outcomes was defined (range 0–14). A median of 2 outcomes per paper were pre-specified in the methods (range 0–12), with a median of only 2 outcomes both defined and pre-specified (range 0–12). The most commonly reported outcome, reported by 26 studies, was “Operative details”, however 8 different definitions were used. Overall, there was a poor proportion of defined and pre-specified outcomes, employing a wide range of different definitions.

Conclusion: There is a need for a core outcomes set for AFG to minimise outcome and reporting bias and aid evidence synthesis.

Posters: Coloproctology

0023L: THE CORRELATION OF SURGEONS' AGE TO POST-OPERATIVE MORTALITY

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Aim: This study aimed to identify whether surgeon's age is related to colorectal cancer mortality rates.

Methods: Mortality rates for surgeons who performed >10 elective resections for bowel cancer in 2010–2012 were extracted from data published by the Association of Coloproctology of Great Britain and Ireland. Surgeons' ages were estimated based on year of graduation, extracted from the General Medical Council register. Surgeons were split in to three age groups for analysis (≤ 42 , 43–49 and ≥ 50 years).

Results: Outcomes were available for 25,827 procedures performed by 615 surgeons. Overall pooled unadjusted mortality was 2.9% (745/25827). For

surgeons aged ≤ 42 years it was 2.27% (from 225 surgeons), it was 3.16% ($n = 192$) for ages 43–49 years, and 3.28% ($n = 127$) for those ≥ 50 years. Surgeons aged ≤ 42 had significantly lower rates versus both surgeons aged 43–49 (odds ratio (OR) 1.39, $p < 0.001$) and ≥ 50 (OR 1.45, $p < 0.001$). There were no significant differences between surgeons aged 42–49 and ≥ 50 years. Analysis of adjusted mortality rates replicated these findings.

Conclusion: Surgeons aged ≤ 42 years have lower post-operative colorectal cancer mortality rates than surgeons aged >42 years. However, risk-adjustment may have been incomplete and senior surgeons may undertake more complex and high-risk procedures.

0145: THE YIELD OF PATHOLOGY FROM DIAGNOSTIC FLEXIBLE SIGMOIDOSCOPY IN PATIENTS UNDER 40 YEARS

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Aim: Flexible sigmoidoscopy (FS) allows both macroscopic and histological assessment of the left colon and rectum. Current guidelines define the need for FS in patients over 40 yrs, but is lacking in those under 40yrs.

Methods: Data was analysed from our prospectively collected database over a one-year period (April 2013–14). Patients undergoing diagnostic FS under 40yrs were included ($n = 136$). Fisher's exact and Chi squared were used for analysis.

Results: 38 patients (28%) yielded pathology; 29 (21%) had a colitis, 5 (4%) had polyps, and 4 patients had other benign pathology. No patients had a cancer. Analysis of indication for FS indicated a non-significant ($p = 0.09$) propensity of finding pathology in patients with rectal bleeding and abdo pain or change of bowel habit (46%).

Our data supports a smaller published series (Mittapalli et al 2008) for pathology yield ($p = 0.33$).

Conclusion: This study provides evidence that FS in the under 40's identifies pathology in approximately 1 in 4 patients. Presenting with a PR bleed in addition to other symptoms is, perhaps more likely to yield pathology.

0161: WHAT HAPPENS TO PILONIDAL ABSCESES AFTER EMERGENCY INCISION AND DRAINAGE?

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Aim: Pilonidal abscess is a common condition, which is managed by the on-call team. It is recognised that some patients will recur after incision and drainage (I&D) and will require further treatment. Our aim was to identify what proportion of patients undergoing I&D required subsequent intervention, with the aim of informing our follow-up policy.

Methods: Patients undergoing I&D of pilonidal abscess over a four-year period were identified through theatre registers. Dates of procedures, intervals between procedures and follow-up data were recorded.

Results: I&D was performed 311 times over four years. Median duration of follow-up was 679 days. The risk of recurrence after first I&D was 10.9%, increasing to 20.5%, 42.9% and 66.6% after the 2nd, 3rd and 4th events respectively. Median time to recurrence was 163, 165, 127 and 39 days for 1st, 2nd, 3rd and 4th episode respectively. After the first recurrence, 65% of patients were followed-up. One patient was offered follow-up after third recurrence and none of those with a 4th recurrence had follow-up.

Conclusion: 90% of patients had index drainage only. The risk of recurrence increases with each episode of abscess requiring a drainage procedure and the associated interval decreases. We should follow-up patients after their first recurrence.

0184: AUDIT TO ASSESS EFFECTIVE REPORTING AND IMPROVE EARLY DETECTION OF SURGICAL SITE INFECTIONS IN COLORECTAL SURGERY AT A DISTRICT GENERAL HOSPITAL

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Aim: Surgical site infections (SSIs) affect patient morbidity and have significant financial implications through extended hospital stay. Accurate reporting of SSI is essential for surveillance and early detection of SSIs allows timely intervention. Our aim was to assess effectiveness of