

Aim: For the last 40 years, the Glasgow Coma Scale (GCS) has been an effective clinical tool for assessing the severity of neurological impairment and is a major component of the NICE guidelines for CT head scanning following traumatic head injury.

Methods: We conducted an audit reviewing the level of knowledge of the GCS amongst clinical staff who care for head injury patients.

Results: An initial questionnaire with 31 respondents found that knowledge of the GCS was poor and only 10% of doctors and nurses of all grades recorded the correct GCS when given an example scenario. Following intradepartmental teaching sessions a repeat questionnaire was circulated. 100% of nurses and doctors surveyed ($n = 31$) were able to correctly identify the components of the GCS and scores for each. Ability to correctly score a clinical scenario increased to 64% in Junior Nurses, 70% in Senior Nurses, 83% in Junior Doctors and 75% in Specialist Registrars.

Conclusion: Knowledge of the GCS amongst clinical staff was found to be poor. This was improved following the intervention of departmental teaching. This allows for better neurological monitoring and prognostication in head injury patients as well as more appropriate use of facilities such as CT scanning.

0293: THE PREVALENCE OF MULTIMORBIDITY IN AN OLDER ACUTE GENERAL SURGICAL POPULATION

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Aim: Multi-morbidity is defined as the presence of two or more chronic conditions and is a new and emerging concept in geriatric medicine with implications for patient outcomes. With increasing rates of surgical procedures in the elderly the prevalence of multi-morbidity in the acute general surgical population is currently unknown.

Methods: In four U.K. sites comprising rural and urban populations, we studied consecutive patients aged over 65 years that were admitted as an emergency to acute general surgical units. Patients with orthopaedic, urological, neurosurgical or vascular conditions were excluded. Patients were assessed for baseline demographic data and classified as having multi-morbidity if they had a past medical history of two or more pre-defined chronic conditions.

Results: A total of 267 patients were analysed [mean age 77 years (range 65–98); 140 (52.4%) women]. The majority [$n = 198$ (74.2%)] had multi-morbidity. Increasing age ($p < 0.001$) but not sex ($p = 0.61$) predicted multi-morbidity.

Conclusion: In a representative UK wide population, three quarters of people aged over 65 years admitted with an acute general surgical emergency had multi-morbidity. Follow-up data will determine the influence of multi-morbidity on short and long-term patient outcomes in this cohort.

0310: IS FASTER BETTER? OPERATIVE DURATION IN EMERGENT APPENDICECTOMY

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Aim: Emergent appendicectomy has been accepted generally as the most appropriate treatment. Till now, there has been no objective conclusion on the timing of appendicectomy. The objective of this study was to investigate the effect of operative duration of appendicectomy on outcomes such as complications and length of stay (LOS).

Methods: Retrospective study of 271 patients who had undergone appendicectomy in Year 2013 was conducted. Data includes time of presentation to Emergency Department, time of operation, length of stay & complications were collected. Pearson's 'r' coefficient was used to determine the effect of operative duration on LOS.

Results: 182 patients had at least one form of diagnostic imaging modality performed. Pre-operative laboratory investigations were conducted in most patients. 193 out of 261 patients (73.9%) had their surgery within 24

hours of presentation. 253 patients (93.3%) had undergone laparoscopic appendicectomy. The average operating time was 63.8 mins.

There was a linear correlation between the operative duration and the length of hospital stay. There was no significant difference in the incidence of complications of acute appendicitis.

Conclusion: The timing of appendicectomy was associated with increased length of stay. However, operative duration did not affect the incidence of complications of acute appendicitis.

0325: CAN ROUTINELY COLLECTED CLINICAL MARKERS FORECAST THE LIKELIHOOD OF NEXT-DAY DISCHARGE FROM HOSPITAL?

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Aim: Bed capacity is a finite resource under mounting pressure in the NHS. Few scoring systems are available to predict patient discharge from hospital. The purpose of this study is to identify routinely collected markers capable of predicting the likelihood of next-day discharge.

Methods: 169 general surgery emergency admissions were included in this prospective pilot study. The following variables were recorded for each patient: Early Warning Score (EWS); presence of a catheter or nasogastric (NG) tube, eating and drinking, "awaiting a scan" and "booked for theatre" status; use of antibiotics, morphine, intravenous fluids and oxygen (O₂). Bivariate analysis was used to identify the variables influencing length of stay (LOS).

Results: O₂ supplementation was the only predictor of a LOS greater than one day ($P < 0.001$) but the EWS ($P = 0.005$), O₂ ($P < 0.001$) and NG tube status ($P = 0.031$) influenced mean LOS. All other variables were not significantly associated with LOS.

Conclusion: This study demonstrates that the selected variables do not individually predict the likelihood of next-day discharge, although O₂ supplementation was consistently associated with a longer LOS. The advent of electronic observations may facilitate recording of patient information and may further determine the influence of routinely collected markers on LOS.

0372: DOES THE USE OF A STANDARDISED CLERKING PROFORMA FOR ACUTE GENERAL SURGERY ADMISSIONS IMPROVE THE QUALITY OF DOCUMENTATION: A PROSPECTIVE TWO-CYCLE AUDIT

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Aim: The surgical clerking is one of the most important documents in a patient's notes. The aim of this study was to assess the impact of the use of a surgical clerking proforma on the quality of documentation in the initial clerking.

Methods: Data were collected in two cycles on the completeness of clerkings according to 46 domains derived from RCS guidelines. A surgical clerking proforma was introduced to the department. Data were re-collected in cycle two and each domain was compared to cycle one, using Fisher's exact test, with $p < 0.05$ taken as significant.

Results: 43 patient notes were reviewed in the first cycle and 55 patients in the second cycle. The surgical proforma was used for 46 patients in the second cycle (83.6%). Significant improvements were observed for 36 domains (78.3%) including on-call consultant name, medical history, social history, physical examination, observations, blood results and management plan including nil by mouth status ($p < 0.05$ for all). No difference was observed for patient demographic information and clerking doctor details.

Conclusion: The use of a clerking proforma improved documentation rates for key domains, allowing accurate information to be recorded and appropriate clinical decisions to be made.

0442: POST EMERGENCY LAPAROTOMY PNEUMONIA: THE SIZE OF THE PROBLEM

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Aim: Outcomes for emergency laparotomy are poor compared to elective surgery and variable between centres. A significant proportion of mortality and morbidity is due to respiratory complications. This study

aims to investigate the impact of pneumonia post emergency laparotomy.

Methods: A retrospective case note analysis was undertaken of consecutive emergency laparotomies in a single centre over 8 months. Factors recorded were demographics, indication and procedure undertaken, diagnosis of post-operative pneumonia, length of stay (LOS) and 30-day mortality. Incidence data were analysed using Fisher's exact test and LOS data with a Mann-Whitney-U test.

Results: 80 laparotomies were undertaken during the study period, 29(36.5%) developed a post-operative, radiologically proven pneumonia. The overall 30-day mortality of the study group was 15%(n = 12), 27.6%(8) in the pneumonia group and 7.8%(4) for the non-pneumonic group(p = 0.02). The median total LOS for the non-pneumonic group was 8 days(IQR = 9.5), and 18 days(IQR = 15)(p = 0.02) for the pneumonia group.

Conclusion: Presence of post-operative pneumonia significantly increases mortality risk. Overall LOS is significantly increased by a median of 10 days. Average added cost per pneumonia taking into account bed space alone is £4300 (based on costing from Intensive Care Society). Further studies are required to investigate clinically and cost effective, preventative and treatment strategies.

0447: A CLOSED LOOP AUDIT ON THE DOCUMENTATION OF OPERATION NOTES

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Aim: The Good Surgical Practise guideline was launched in 2014 and included guidance on what should be completed as standard in our operation notes. The aim was to identify if UHSM was meeting the standards set and can we do anything to improve the contents of our operation notes

Methods: We audited the operation notes of the inpatients and compared this to the standards set. We presented the results to the department and placed copies of the guidelines in theatre. We then re-audited the operation notes.

Results: The first set of data included 42 patients and the re-audit contained 36. It showed room for improvement across all 20 points audited. Areas of particular weakness included Time at only 14%, Blood loss at 0% and surprisingly only 60% in DVT prophylaxis plan documentation. Re-audit showed improvement across the board but there is still room for improvements.

Conclusion: We need to continue efforts to improve the quality of our documentation, primarily focusing on documentation of time, type, intra operative diagnosis and findings, blood loss and detailed post-operative plan. It demonstrates that a simple intervention such as a presentation and a few flyers have made a recordable difference.

0482: IS GROUP AND SAVE REQUIRED BEFORE LAPAROSCOPIC APPENDICECTOMY?

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Aim: Laparoscopic appendicectomy is a safe operation, with low rates of bleeding complications. It is commonly insisted that a patient has a group and save (G&S) sample taken pre-operatively, often delaying emergency operating lists and introducing extra costs (£18.39 per sample excluding laboratory staffing).

Our aim was to see if routine G&S is required.

Methods: Retrospective review of all patients undergoing laparoscopic appendicectomy between April 2012–March 2014. Patients were identified using hospital coding records. Transfusion department records were reviewed to see which patients had undergone pre-operative G&S or cross-match, and perioperative transfusion.

Results: 371 operations were performed in 2 years (median age 27, M:F 164:207).

276 (74%) underwent G&S.

4 patients in total were transfused post-operatively (1.1%), 3 with pre-existing transfusion dependent haematological conditions. 1 patient (0.3%) was transfused post-operatively for a pelvic haematoma related to a port-site bleed.

Total cost of G&S £5075

Conclusion: The blood transfusion rate for bleeding complications following laparoscopic appendicectomy is 0.3% in our unit. G&S samples for these procedures cost £5075 over 2 years. Abandoning pre-operative G&S in patients without pre-existing transfusion dependent conditions appears to be justified, would lead to financial savings, and could reduce delays in emergency operating theatre lists.

0485: 4-CYCLE AUDIT LOOP: RATIONALISING ROUTINE GROUP & SAVE REQUESTS FOR PATIENTS WITH RIGHT ILIAC FOSSA ABDOMINAL PAIN

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Aim: To review and rationalise routine “group & save” (G&S) and “cross match” requests for patients admitted under general surgery with right iliac fossa (RIF) abdominal pain, reducing unnecessary and costly requests for patients who are unlikely to require transfusion.

Methods: A 4-cycle retrospective audit was performed of patients under 65 with RIF pain, admitted to a district general hospital. Trust guidelines were introduced following an initial survey (G&S should not be performed routinely in patients under 65 presenting with RIF pain). Audit cycles were completed after the introduction of trust guidelines, after further education to clinical staff and finally to check maintenance of practice.

Results: In the initial survey, 72% (97/158) patients had a G&S. Following introduction of Trust guidelines, 20% (24/30) patients had a G&S. In the third survey, 17% (8/47) had a G&S and in the final audit cycle 5% (2/39) had a G&S.

Conclusion: Introduction of Trust guidelines has reduced the rate of unnecessary G&S requests. This was further improved with re-education after the junior doctor handover and maintained 4 months thereafter demonstrating a change in practice.

0490: EVALUATING THE COST OF 'ALCOHOL ON BOARD' AS A SIGNIFICANT CONTRIBUTOR TO ACCIDENTAL BLUNT TRAUMA

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Aim: Blunt trauma is one of the primary reasons for acute admission to a trauma unit. We investigate the relationship between ‘method of injury’ (MoI) and Injury Severity Score (ISS) in a major regional trauma centre.

Methods: On 31st December 2014, the Trauma Audit & Research Network (TARN) exported all records for OLOL, Drogheda. Hospital In-Patient Enquiry (HIPE) provided MoI, ISS, ‘length of stay’ (LoS) and ‘cost of admission’ (CoA). All cleaning of data and statistical analysis was performed in R.

Results: Initial analysis revealed that: (a) penetrating trauma is less than 3% of all trauma admissions; and (b) 3 categories of blunt trauma account for over 90%. “Fall < 2m” corresponds to 46% of total admission volume, with “Road Traffic Accident” (RTA) exactly half this (23%). Both have strong relationship with alcohol as the primary MoI. Moreover, 22% of admissions had an ISS under 9, 43% were between 9–15, with 35% over 15.

Conclusion: Every major injury due to trauma costs in excess of €65,000. Alcohol-related blunt trauma accounts for 29% of all trauma admissions presenting at OLOL. We report on the relationship of alcohol-related MoI and ISS to LoS and CoA, and key implications for patient management.

0614: CAN PROLONGED LENGTH OF STAY BE PREDICTED IN ACUTE ELDERLY SURGICAL ADMISSIONS?

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Aim: To quantify prolonged length of stay and attributable factors after acute admission in elderly patients admitted to a teaching hospital following ‘medically fit for discharge’ (MFD) status.

Methods: 80 Consecutive patients from a prospectively maintained electronic database were included if they were aged >70 yrs presenting to the acute general surgery take.

Medical records were interrogated and a predetermined proforma was populated reporting on demographics, modified Barthel Index, total length of stay, time to- diagnosis/PT/OT assessment/treatment, ASA, MFD date, cause of delayed discharge.