Abstract PTU-034 Table 1 Indications and associated complications for ERCP in different age groups (% in brackets)

Age Group/Indication	Gallstones	Ca Pancreas	Stricture unspecified	Cholangio	Post Pancreatitis	Other	Not documented
A	AB33 (70.2)	AB7 (14.9)	AB2 (4.3)	AB0 (0)	AB1 (2.1)	AB1 (2.1)	AB3 (6.4)
B	AB101 (67.3)	AB19 (12.7)	AB4 (2.7)	AB5 (3.3)	AB1 (0.7)	AB13 (8.7)	AB7 (4.7)
Total	AB134 (68.0)	AB26 (13.2)	AB6 (3.0)	AB5 (2.5)	AB2 (1.0)	AB14 (7.1)	AB10 (5.1)
Age Group/Complication	**Bleeding**	**Pancreatitis**	**Biliary sepsis**	**Perforation**	**Other**	**Totals**	
A	AB1 (12.5)	AB1 (12.5)	AB1 (12.5)	AB0 (0)	AB5 (62.5)	8	
B	AB3 (15)	AB6 (30)	AB4 (20)	AB1 (5)	AB6 (30)	20	
Total	AB4 (14.3)	AB7 (25)	AB5 (17.9)	AB1 (3.6)	AB11 (39.3)	28	

PTU-035 DEVELOPMENT AND INITIAL VALIDATION OF PROGNOSTIC SCORING SYSTEMS FOR LOWER GASTROINTESTINAL BLEEDING

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Introduction Lower gastrointestinal bleeding (LGIB) is a common and heterogeneous condition, in which there is a paucity of data concerning predictors of adverse outcomes. This study aimed to identify independent risk factors for adverse outcomes in LGIB, and derive prognostic scoring systems to stratify patients by risk on admission.

Methods The Aberdeen bleeding unit opened in 1991 and has recorded demographics, presenting features, haemodynamic status and outcomes on all admissions in a comprehensive database. Analysis was performed on admissions due to LGIB over the period 1991 to 2005. Independent risk factors for re-bleeding, requirement for surgical intervention, and mortality at 30 days were elucidated by means of univariate and multivariate binary logistic regression analyses. Risk factors were then modelled into simple numerical prognostic scoring systems which underwent preliminary validation tests in order to determine their predictive performance using receiver operating curve analysis.

Results Over the study period, 2385 patients were admitted with LGIB. Re-bleeding was experienced in 322 (13.5%), 135 (5.7%) required surgery and 129 (5.6%) died within 30 days of admission. Multivariate analysis revealed that re-bleeding was associated with inpatient status at the time of initial bleed (OR 1.8; 95% CIs 1.3–2.5), age 60–79 (OR 1.5; 95% CIs 1.0–2.3), age > 80 (OR 2.1; 95% CIs 1.3–3.2), syncope (OR 2.3; 95% CIs 1.5–3.6), underlying malignancy (OR 2.1; 95% CIs 1.0–4.3), hypotension (OR 2.3; 95% CIs 1.4–3.6) and haemoglobin < 10g/dL (OR 5.0; 95% CIs 2.8–8.9). 30 day mortality was associated with inpatient status at the time of initial bleed (OR 3.3; 95% CIs 2.0–5.4), age 60–79 (OR 3.3; 95% CIs 1.5–7.1), age > 80 (OR 6.0; 95% CIs 2.6–13.7), underlying liver disease (OR 7.2; 95% CIs 2.9–17.7), hypotension (OR 2.9; 95% CIs 1.5–5.3), and tachycardia (OR 2.1; 95% CIs 1.3–3.6). No independent risk factors were identified for the requirement of surgery. Separate prognostic scoring systems (0–7) were created for re-bleeding and mortality outcomes, with area under ROC curves 0.742 and 0.802 respectively. A score of 0 reflected a re-bleeding risk of 1.1% and 30 day mortality of 0.0%, whereas a score of 6 reflected a re-bleeding risk and 30 day mortality risk of 50% in both scoring systems. No patients scored the highest risk grade of 7 in either model.

Conclusion These scoring systems can be used to calculate re-bleeding risk and 30 day mortality in patients with LGIB. Further external validation and confirmation is required.

Disclosure of Interest None Declared

PTU-036 ENDOSCOPIC MANAGEMENT OF MALIGNANT GASTRIC OUTLET OBSTRUCTION: RESULTS FROM A NEWLY CREATED REGIONAL CANCER SERVICE

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Introduction Malignant gastric outlet obstruction can be a distressing medical condition leading to considerable morbidity with a well recognised poor prognosis. Previous studies (mostly outside of the UK) have shown that endoscopic insertion of a duodenal stent can alleviate the obstructive symptoms to good effect (1–3). In 2009, we set up a regional service for duodenal stent insertion with an aim to replicate these results across a UK upper gastro-intestinal cancer network (catchment area 1.4 million).

Methods A retrospective analysis was performed in patients who had an endoscopically placed duodenal stent for inoperable cancer causing mechanical gastric outlet obstruction. We reviewed hospital/endoscopy electronic records regarding patient demographics, length of hospital stay after the procedure, endoscopy re-intervention and survival.

Results Between July 2009 and November 2012 a total of 27 patients underwent duodenal stent (uncovered WallFlex®, Boston Scientific) insertion. 15 were men, mean age of 70.6 years (range 27–86). 23/27 (85%) patients were discharged home after the procedure, 2 were transferred to a hospice and 2 died in hospital. The average length of hospital stay after the procedure was 5.7 days (range 0–25).

Endoscopy re-intervention was performed in 2 patients for stent occlusion requiring further stent insertion. 22 patients have been followed until death with a mean survival period of 12.5 weeks (range 1–34). 5 patients remain alive at the time of abstract submission.

Conclusion Duodenal stent insertion offered a good palliative option in most of our patients. Our patient outcomes compared favourably to previous published studies.

Disclosure of Interest None Declared

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PTU-037 IMPROVING ACUTE UPPER GI BLEEDING SERVICES IN A DISTRICT GENERAL HOSPITAL

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Introduction Colchester General Hospital (CGH) serves a population of 360,000. Approximately 300–350 patients present with acute upper gastrointestinal bleeding (UGIB) per annum. NICE guidelines recommend gastroscopy (OGD) within 24 hours of presentation. In 2009, there was no dedicated provision for OGD for UGIB cases. Only 15% of patients at CGH met the 24 hour target.

To improve performance, we introduced a new Early Morning Bleeding (EMB) OGD list. The EMB list providesprotected endoscopy slots between 08:00 to 09:00. This 5 days week service was introduced in July 2009. To further improve our performance we extended this to an EMB list 7 days a week in November 2011. Data was collected for 2011 and 2012 to assess the outcomes of our performance.

Methods Data was collected for all UGIB cases over the same three-month period (March- May) in 2009, 2011 and 2012. Cases were identified from investigation request forms. Inclusion for the analysis was the OGD indication being either for haematemesis, melaena or unexplained haemoglobin drop.

For each case we obtained the admission date and time, OGD date and time and the length of hospital stay (LOS) from hospital databases. The endoscopic diagnosis and treatment information was also collected.

Patient s admitted for UGIB were separated from patients developing bleeding after admission, by the use of electronic discharge summaries and patient records. Wait from admission to OGD and LOS were calculated for patients admitted for UGIB. Surgical theatre logbooks were consulted to identify emergency out-of-hour OGDs for the period 2007–2012.

Wilcoxon rank sum tests were used to compare wait times to OGD and LOS.

Results

Abstract PTU-037 Table

	AB2009 (no EMB)	AB2011 (5 day EMB)	AB2012 (7 day EMB)
Total Cases	72	85	81
Admission with UGIB	54	52	40
OGD < 24 hr (%)	14.8	40.4	75.0
Median wait for OGD (hr)	51.7	27.5*	20.5*§
Median LOS (days)	6	3*	3*
Emergency OGD per yr	11.5	7.1*	2.8*

* $p < 0.05$ vs 2009
§ $p < 0.05$ vs 2011

Conclusion Providing an EMB list 7-days is an effective method to improve services. Compliance with 24hr target guidelines improved from 14.8% to 75%. LOS was reduced by 50%. Providing a 5-day service resulted in substantial improvements but did not achieve adequate compliance. Whilst our study is too small to assess any impact on mortality, the reduction in emergency out-of-hours procedures with a 7-day service indicates an improvement in patient safety.

The EMB system is relatively cheap: during the week no new resources are required. We had only to staff new lists at weekends. The system ensures that most procedures are performed by consultant gastroenterologists experienced in endoscopic therapy for UGIB. The marked reduction in emergency cases suggests that any further improvements in outcomes from providing a (much more expensive) 24/7 service are unlikely to be cost effective.

Disclosure of Interest None Declared

PTU-038 SHOULD A PLASTIC OR A FULLY COVERED METAL STENT BE PLACED AT INDEX ERCP WHEN A PATIENT PRESENTS WITH JAUNDICE DUE TO A MALIGNANT DISTAL BILIARY STRICTURE?

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Introduction Traditionally plastic stents (PS) are inserted at the index ERCP to treat obstructive jaundice from malignant distal biliary strictures. However, with the development of fully covered metal stents (C-SEMS), this approach is now debated and practise at the Royal Liverpool Hospital (RLH) has now changed towards preference for C-SEMS in this clinical scenario. This of course has cost implications as C- SEMS are 15–20 times more expensive than plastic stents. The aim of this study is to determine the benefit of C-SEMS over PS placement, to answer the question which stent should be inserted at the index ERCP if a patient presents with malignant obstructive jaundice

Methods A retrospective audit was performed of patients undergoing ERCP with placement of plastic or SEMS for obstructive jaundice due to malignant distal biliary strictures at the RLH between March 2007 and December 2012. Clinical history, course and outcomes from MDT documents, electronic patient records and the endoscopy database were recorded on a standardised proforma. Only PS and C-SEMS insertion at the index ERCP were included.

Results Of 147 patients identified, 72 were excluded (bare metal stents or partially covered metal stents placed). This left 43 in PS group and 32 in C-SEMS group. 21 patients underwent surgical resection; 17 within PS and 4 within C-SEMS. Of these no patient with C-SEMS but 3 (18%) patients with plastic stents required re-intervention prior to surgery due to stent dysfunction. In the remaining palliative patients (PS: n = 26 and C-SEMS: n = 28), 19 with plastic stents (73%) and 3 patients with SEMS (7%) required endoscopic re-intervention due to stent dysfunction ($p < 0.001$). Median time to re-intervention was 32 days (range 5–58) for PS and 25 days (range 25–38.5) for C-SEMS ($p = 0.394$). Overall, PS at the index ERCP only offered definitive stenting in only 53% (23/43) compared to 91% (29/32) by C-SEMS ($p = 0.001$).

Conclusion Placement of a fully covered SEMS (C-SEMS) at index ERCP offered a definitive procedure in majority of patients compared to plastic stent (PS) which was just over half. Whilst C-SEMS significant more expensive than PS, this increased cost may be potentially be offset by the reduction in the need for repeat ERCP intervention and subsequent stent insertions. A full cost analysis is currently being undertaken.

Disclosure of Interest None Declared