

Gastric varices were classified as: GOV1 4 (31%), GOV2 6 (46%), IGTV1 3 (31%). There were co-existing oesophageal varices in 9 of 13 (69%), of which 3 were banded in addition but not actively bleeding. Mean thrombin dose used was 1125IU (range 500–2000). Immediate haemostasis was achieved in all 15 cases. Propanolol was commenced post endoscopy in 14 (93%) patients and maintained at a mean dose of 80mg/day (SD 35, range 20–160).

Median follow up time was 129 days (range 9–753). No patient received TIPSS or liver transplantation. Rebleeding occurred in 3 (20%) patients, at 14, 43 and 299 days respectively. All 3 patients died following rebleeding (2 declined treatment, 1 pre-hospital arrest). There were 7 deaths in total during the study period, the remainder due to liver failure (2), pneumonia (1), metastatic cancer (1). Cumulative survival at 1, 3, 6, 12 months was 73%, 59%, 59%, and 50% respectively.

Conclusion Single dose thrombin injection in our series appears to be a safe, easily administered and effective endoscopic therapy for acutely bleeding oesophagogastric varices. Mortality however remains high due to their underlying liver disease.

Disclosure of Interest None Declared.

PWE-060 THE HOSPITAL ANXIETY AND DEPRESSION SCALE (HADS) PREDICTS PAIN AND DISTRESS AT ENDOSCOPY

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Introduction Tolerability of endoscopy is variable, with pain and distress influencing overall experience. Currently, there is a paucity of work evaluating distress, with no reliable tools established as predictors of endoscopic tolerability. A recent study found higher levels of discomfort during colonoscopy in patients scoring 11 or more (out of a maximum of 21) on the anxiety portion of the HADS questionnaire evaluated post-procedure.¹ Our study evaluates the pre-endoscopic use of HADS and its value in predicting procedural pain and distress.

Methods Consecutive patients attending for clinically indicated OGD or colonoscopy were prospectively recruited between September 2011 and June 2012 at a University hospital. Prior to endoscopy, patients completed the HADS questionnaire and were familiarised with the 10-point numeric rating scale used to assess expected pain and distress and post-procedural pain and distress. Patients with high HADS anxiety scores (HADS \geq 11) were then compared with those with low scores (HADS \leq 10), with the cut off value of 11 defined in accordance with the original HADS paper.² Data was analysed using SPSS version 20, with a Mann Whitney U test used to determine differences between procedural pain and distress scores.

Results 610 patients were prospectively recruited (280 male patients, median age 56 years, range 17–90 years, 306 OGD's), with 21% (128/610) having HADS anxiety scores > 11 . Of these individuals, 51% (65/128) had elevated procedural pain, with 53% (68/128) having elevated procedural distress. By comparison in patients with HADS anxiety scores < 10 , only 32% (154/482) had elevated procedural pain and 37% (176/482) had elevated distress. Comparisons between the two groups (HADS \geq 11 and those with HADS \leq 10) demonstrated significant differences ($p = 0.001$ for pain and $p < 0.001$ for distress). Median scores for the two groups are highlighted in Table 1.

Abstract PWE-060 Table 1 Median procedural pain and distress scores

	HADS anxiety score of 11+	
	Less than 10	11 or more
Median Procedural pain Score	3	5
Median Procedural distress Score	2	5

Conclusion This is the first study demonstrating how the HADS could be used to predict endoscopic tolerability, with HADS anxiety scores ≥ 11 associated with over a 50% chance of having procedural pain and distress. Adopting HADS into pre-endoscopy assessments could help identify patients likely to poorly tolerate endoscopy, leading to earlier consideration of sedation, analgesia and other endoscopic measures to minimise pain and distress.

Disclosure of Interest None Declared.

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PWE-061 ERCP PRACTICE IN A UK DISTRICT HOSPITAL– ARE WE MEETING THE STANDARDS?

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Introduction The 2004 NCEPOD report “Scoping our Practice”¹ had been highly critical of certain aspects of ERCP practise in UK, raising specific concerns about case selection and sedation practise. We analysed our own ERCP practise in a medium sized district hospital with a moderate case workload and a growing proportion of elderly population.

Methods Retrospective data was collected from 263 ERCPs performed between 2009–2011. Comprehensive information regarding demographics, indications, success and complication rates was recorded from ERCP reports and case notes and our practise was compared to NCEPOD recommendations.

Results 263 (n) ERCPs were included in this study. Median age was 72 (range = 16–98), 63% were females. 55% of patients were ASA grade 3–4. 84% of ERCPs were of grade 1 difficulty. All ERCP referrals were reviewed and authorised by a consultant gastroenterologist. Indications for ERCP were choledocholithiasis (63%), pancreatic or biliary malignancy with obstructive jaundice (18%), stent removal/replacement (10%), dilatation of biliary ducts with abnormal liver function tests (10%) and others (4%). $> 90\%$ of ERCPs were performed with a therapeutic intent and success was achieved in 86% of ERCPs at first attempt. Our successful cannulation rate was of 92%. Only 9.1% of cases were referred to tertiary centres for further management. Prophylactic oral ciprofloxacin was used in 60% of patients. Patients received a combination of midazolam and pethidine with a mean dose (\pm SD) of 3.2 mg (\pm 2.03) and 44.3 mg (\pm 16.05) respectively. Reversal with flumazenil or naloxone was not required in any of the patients included in this study. Biliary sphincterotomy was performed in 60%(156), pre-cut sphincterotomy in 2.6%(7), stricture dilatation in 9.5%(25), biliary stenting 30.4%(80), balloon sphincteroplasty 3%(8), balloon trawl 67%(177) and mechanical lithotripsy 8.7%(23). 78.7% of malignant strictures were successfully stented (37). Overall complication rate was 5.7% - moderate haemorrhage requiring blood transfusion in 1.5%(4), post ERCP pancreatitis in 2%(6), sepsis 1.9%(5), duodenal perforation 0.7%(1) and respiratory arrest in 0.7%(1). 30 day mortality rate was 0.76%(2).

Conclusion In contrast to NCEPOD report, our audit demonstrates that ERCP practise is effective, safe and of high quality in a district general hospital setting. Complication and mortality rates are minimal and comparable to national standards, even in the elderly population. Post ERCP very low sepsis rate is most likely due to use of prophylactic antibiotics (Ciprofloxacin).

Disclosure of Interest None Declared.

REFERENCE

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PWE-062 GASTROSCOPY WITHOUT A GASTROSCOPE! FEASIBILITY IN A PORCINE MODEL USING A MAGNETIC CAPSULE

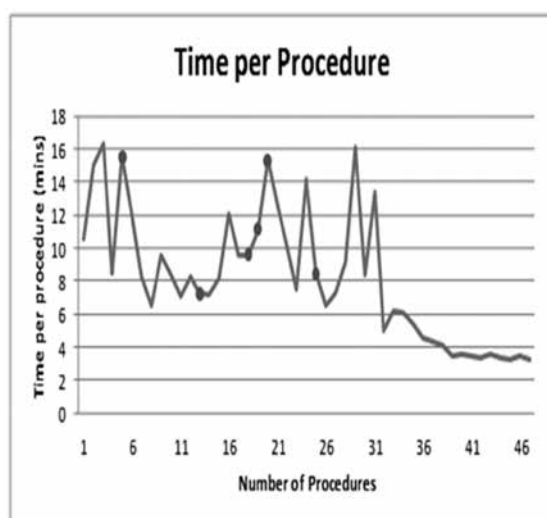
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Introduction There is little evidence that gastroscopy affects patient outcomes¹, but it is uncomfortable and incurs the risk of intubation and sedation. Capsule endoscopy is a non-invasive tool used primarily to image the small and large bowel. Although a large volume organ, examination of the stomach might be enabled by magnetic control allowing manoeuvrability and positional change.

Methods A standard porcine stomach model, commonly used for endoscopy training purposes was used in a feasibility study of magnetically steerable capsule endoscopy. Different coloured/shaped beads were sewn into each major location of the stomach (cardia, fundus, greater and lesser curve, anterior and posterior wall, antrum and D1). The stomach was distended with 1000mls of water. Endoscopy was performed according to a set protocol using a handheld magnet, Mirocam Navi (Intromedic Ltd), positional changes (supine, 30° right lateral, head down, 30° left lateral) and a “real time” viewer. The order and time each tag was identified was recorded alongside the total procedure time.

Results All stomach tags were identified in 87.2% (41/47) of examinations. Missed tags (marked in figure as red dots, representing an incomplete examination) included antrum (3/6), cardia (2/6) and posterior wall (1/6): none were missed in the latter 25 procedures. Mean examination times for the first 23, second 23 and all procedures were 10.28, 6.26 ($p < 0.001$) and 8.27 (3.25–16.32) minutes and all were completed by 4 mins after 39 procedures. The order in which tags were identified in the mid-body of the stomach (greater, anterior and posterior) was variable and interchangeable. If this area was considered as one site, the order of tag identification would be: cardia (1), fundus (2), mid body (3), lesser curve (4), antrum (5) and D1 (6) in 76.6% of examinations. No difficulties were observed with the current procedure protocol and therefore no modifications recommended.



Abstract PWE-062 Figure

Conclusion Examination of the upper gastrointestinal tract is feasible using a magnet and positional change as demonstrated in this porcine model. A learning curve was evident and this model might be used for training in the future. Further investigation using porcine models and in humans is necessary to fully realise the scope of this exciting novel technology.

Disclosure of Interest None Declared.

REFERENCE

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PWE-063 EVALUATION OF A PREVIOUSLY DESCRIBED SCORING SYSTEM FOR PREDICTING COMPLICATIONS POST ERCP

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Introduction Endoscopic retrograde cholangiopancreatography (ERCP) is widely performed for the management of biliary and pancreatic duct disorders. Despite this, ERCP is associated with a significant complication rate, with the literature reporting rates of post-procedural pancreatitis of 1–5%, cholangitis in 1–5% and haemorrhage in 1%. A previous study (Jeurnink *et al* 2011¹) described a prognostic model for predicting those patients at greater risk of developing post ERCP complications, and identifying those who may be safely discharged shortly after ERCP. The aim of this study was to validate this scoring system in an external cohort to assess whether it can be used in general clinical practise.

Methods Details of all patients undergoing ERCP over the 22 month period from May 2010 to February 2012 were recorded on an institutionally approved database. Electronic records were subsequently accessed to identify post ERCP complications within 30 days of procedure. The predictive score as described was retrospectively calculated and applied to all patients, with a score > 3 being considered high risk. Sensitivity, specificity, negative and positive predictive values were then calculated.

Results 697 patients (409 females, mean age 64, mean ASA grade 2.35) underwent ERCP during the study period. The overall complication rate was 9.0% (63/697); cholangitis 2.3% ($n = 16$), pancreatitis 2.1% ($n = 15$), bleeding 1.6% ($n = 11$), perforation 1.3% ($n = 9$) and miscellaneous in 1.7% ($n = 12$). The mortality rate was 0.4% in our cohort ($n = 3$). 681/697 (97.7%) had a predictive score < 4 but ERCP grade 1/2/3 was 531/149/17 respectively. Of those with a predictive score ≥ 4 , 12.5% ($n = 2/16$) developed a post-ERCP complication (both severe pancreatitis) versus 8.4% ($n = 57/681$) with a score < 4 ($p = \text{ns}$). Using the predictive score gave a sensitivity of 3.4%, specificity of 97.8%, positive predictive value of 13% and a negative predictive value of 92%.

Conclusion The predictive scoring system as previously described does not accurately stratify patients into high or low risk groups or predict post-ERCP complications in our cohort. This may be due to case mix in the original cohort leading to lack of generalisation. Further work is needed to formulate a clinically applicable scoring system which has higher accuracy.

Disclosure of Interest None Declared.

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PWE-064 UK WIDE SURVEY ON THE PREVENTION OF POST-ERCP PANCREATITIS

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