

patients, commonly with respect to anticipation of pain or the results of the procedure. The ranked preference scores suggested that interaction with the endoscopist, including technical skill of the endoscopist, discomfort during the procedure, manner of the endoscopist and the pre-and post procedure discussions were considered as most important to patients. A majority of patients (55%) preferred the endoscopist to explain the findings, but only 26% specified that they needed to explain the procedure itself. Environmental factors were considered of relatively low importance, including the single sex environment (least important), noise levels, explanation of delay, privacy and intra department waiting time. A majority (82.1%) thought that having a single sex environment was minimally/not important, and only 14.3% of patients were prepared to have a delayed appointment for a single sex environment.

Conclusion Patients undergoing colonoscopy appear to highly prioritise aspects of care relating to the interaction with the endoscopist and the procedure itself. Environment factors are considered to have much less value and specifically having a single sex environment. These findings may assist in service redesign around patient-centred care and patients priorities, and the development of patient satisfaction surveys in endoscopy.

Competing interests None declared.

PTU-217 OESOPHAGO-GASTRODUODENOSCOPY YIELD IN PATIENTS WITH COELIAC DISEASE PRESENTING WITH IRON DEFICIENCY ANAEMIA: A RE-AUDIT

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Introduction In our previous audit it was shown that the majority of patients with iron-deficiency anaemia (IDA) suspected of having coeliac disease (CD) underwent oesophago-gastroduodenoscopy (OGD) and duodenal biopsy as a routine procedure, but only 0.2% patients had serum coeliac screening prior to OGD. It was suggested that routine duodenal biopsy could be avoided by routine serum coeliac screening, as recommended by the British Society of Gastroenterology (BSG). The purpose of this current study was to complete the audit cycle.

Methods Data related to histology and serum coeliac screen of all patients with IDA undergoing OGD in a District General Hospital from January 1st to October 31st 2011 were evaluated. Data were extracted from Gastrointestinal reporting tool[®] and analysed in Microsoft Excel[®] spreadsheet.

Results A total of 732 patients with IDA were referred for OGD. There were 282 male and 450 female patients with a mean age of 69.1 years. Duodenal biopsy was performed in 610 patients (83.3%) at the time of OGD; CD was confirmed histopathologically in 17 patients (2.8%). Duodenal biopsy was normal in 593 patients (97.2 %). A total of 122 patients (16.7 %) had serum coeliac screening prior to OGD; 7 cases (5.7%) were positive.

Conclusion Completing the audit cycle it was found that the majority (83.3%) of patients with suspected CD presenting with IDA continue to undergo OGD and duodenal biopsy as a routine procedure. CD was confirmed histopathologically in 2.8% of cases (compared with 2.52% previously). Of note, 16.7% of patients had serum coeliac screening prior to OGD, compared with 0.2% previously. While this represents an improvement in practice the need for wider use of coeliac screening appears to remain

Competing interests None declared.

PTU-218 PILOT RANDOMISED CROSS-OVER STUDY COMPARING THE EFFICACY OF TRANSNASAL ENDOSHEATH[®] TO STANDARD ENDOSCOPY TO DETECT BARRETT'S OESOPHAGUS

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Introduction A less expensive and safer alternative to standard sedated endoscopy (SE) needs to be considered as a screening method to detect Barrett's oesophagus (BE) in the population, with the aim of reducing the mortality associated with oesophageal adenocarcinoma. The Endosheath[®] transnasal oesophagoscope (TNE) can potentially offer a new alternative to conventional standard endoscopy in diagnosing Barrett's oesophagus. The Endosheath[®] technology uses a sterile, disposable sheath which covers the ultra thin flexible oesophagoscope and isolates it from the patient. The oesophagoscope is placed in a new sheath prior to each procedure which obviates the need for machine washing and permits a quick turnaround. **Aim:** A pilot study to evaluate the efficacy of TNE in diagnosing BE compared with SE and to assess patient acceptability of TNE.

Methods Patients referred for surveillance endoscopy for BE or a clinically indicated routine endoscopy were recruited to both TNE and SE in a randomised cross-over design. The interval between the procedures was at least 6 weeks. TNE findings of endoscopic BE, and presence of intestinal metaplasia (IM) on the biopsy samples were compared against SE, which was used as gold standard. A 10-point visual analogue scale (0 represented the worst experience and 10 the best experience) to assess the post-endoscopy experience and a single question addressing preference for endoscopy type were used to measure patient acceptability of the procedures.

Results 15 patients completed the study, 10 males and 5 females with a mean age of 62.85 years (range 50–76 years). Nine of which were BE surveillance patients and six were referred for a clinically indicated routine endoscopy. Eight patients were randomised to the SE as the first procedure. All the 11 patients with an endoscopic diagnosis of BE on SE were accurately identified with the TNE (sensitivity 100%; specificity 100%). Biopsies were taken in all the 11 Barrett's segments except in one <1 cm segment with TNE due to technical difficulty. IM was detected in 9 out of the 11 patients with BE on SE compared to 7 out of the 11 patients with BE on TNE (sensitivity 77.8%; specificity 100%). Patients reported significantly better experiences of endoscopy with TNE with scores of 6.9 (± 0.81 SEM) compared with 3.7 (± 0.37 SEM) for SE ($p=0.001$). Eight patients (53%) reported a preference for TNE compared with 1 (7%) for SE.

Conclusion Endosheath[®] transnasal oesophagoscope is accurate in diagnosing endoscopic BE and can detect IM. It is better tolerated and preferred by patients, making it a useful screening tool for BE with potential for use in primary care.

Competing interests None declared.

PTU-219 INTRAOPERATIVE ENDOSCOPY: THE FIRST SINGLE-CENTRE UK EXPERIENCE

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Introduction Intra-operative enteroscopy (IOE) is the gold standard for examination of the small bowel. However, with the invention of

capsule endoscopy (CE) and double balloon endoscopy (DBE), the role of IOE has been questioned. Our aim was identify the indications for IOE and associated morbidity and mortality. We also made comparisons between CE and IOE.

Methods All patients that underwent IOE between 2003 and 2011 were included. Data collected included demographics, clinical indications, co-morbidity, transfusion requirements, findings at IOE and subsequent follow-up.

Results There were 17 IOEs, 8 males, with a mean age of 57 years (range 34–93). The median follow-up period was 9 months (range 0–48 months). The indication was iron deficiency anaemia (IDA) in all patients (occult bleeding (n=10) and overt bleeding (n=7)). Ten patients were transfusion dependent. The median haemoglobin pre-IOE was 7.7 g/dl (SD 1.4). 71% (n=12) had significant co-morbidity which included ischaemic heart disease, diabetes and bronchiectasis. Small bowel investigations prior to IOE included DBE (n=9) and CE (n=16). Two patients had therapeutic intervention at DBE, both argon plasma coagulation (APC) to angiodysplasia. In seven patients the abnormality on CE was not reached at DBE. The diagnostic yield for IOE was 88% (15/17). In two patients, the IOE was normal. Findings at IOE included Meckels diverticulum (n=2), arteriovenous malformations (n=7), small bowel tumours (n=3; benign glomus tumour, leiomyoma and carcinoid), bleeding point at surgical anastomosis (n=2; post hepatectomy and at a transplanted pancreatic bed) and small bowel ulceration secondary to NSAIDs and nicorandil. Intervention at IOE occurred in 82% (n=14). These included 10 small bowel resections, two APC, one revision of anastomosis, one oversewing of angiomata. While the morbidity rate was 18% (n=3) with two post-operative bleeds requiring transfusion and a seizure secondary to hyponatraemia, there were no deaths within 30 days. Evidence of recurrent GI bleeding occurred in four patients all of whom have lower transfusion requirements than before, 1 being on tranexamic acid, and 1 on somatostatin analogue. In the two patients with a normal IOE; the patient with IDA remains well 6 months post IOE while the second patient with diarrhoea and pain remains symptomatic without a diagnosis. A comparison of CE against IOE as the gold standard provided CE with a sensitivity, specificity, positive predictive and negative predictive values of 87%, 100%, 100% and 33% respectively.

Conclusion IOE has a high diagnostic yield (88%) with a significant proportion having intervention at IOE. There remains an important role for IOE in a select group of patients with transfusion-dependent anaemia.

Competing interests None declared.

PTU-220 ARE MORE COLONIC POLYPS FOUND WITH BETTER BOWEL PREPARATION?

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Introduction Colonic adenoma detection is one of the quality indicators of endoscopy¹ and is measured as present or not, rather than an absolute number of adenomatous polyps per colonoscopy. Several factors are associated with higher polyp detection rate; adequate colonic distension, retroflexion in the rectum, position change, cleaning and suctioning, with slow and thorough examination of the mucosa.² The quality of bowel preparation is variable and assessed subjectively by the endoscopist. The purpose of this observational study was to determine whether more polyps are detected with good bowel preparation.

Methods All colonoscopies stored on the reporting system database (from 2004 to 2009) in a District General Hospital were identified. Completed examinations with data for both the absolute number of

polyps per colonoscopy and preparation quality were included. Colonoscopies in which cancers were diagnosed, and those with missing data were excluded. Independent T-testing and χ^2 were used in the statistical analysis.

Results 4442 colonoscopies with complete data were identified for analysis. 3489 (78.5%) detected no polyps, and 953 (21.5%) found polyps. Polyp detection rate was not dependent on the quality of the bowel preparation (p=0.81). There was no significant difference between “good” and “poor” preparation in the mean number of polyps detected per colonoscopy (p=0.428), between “good” and “satisfactory” preparation (p=0.329), or between “satisfactory” and “poor” (p=0.936).

Conclusion The quality of bowel preparation appears to make no difference to the likelihood of detecting adenomas in the colon or to the absolute number detected per colonoscopy. These results suggest that either polyp detection rate/number is not a robust measure of quality or the subjective measure of bowel preparation is not discriminatory. Further prospective studies are required to establish a validated bowel preparation score, which, if carefully structured, would standardise preparation as a quality measure and augment the factors known to influence polyp detection rate.

Abstract PTU-220 Table 1

Quality of bowel preparation	Good	Satisfactory	Poor
No. colonoscopies (%)	2458 (77.8)	1361 (30.6)	623 (14.0)
Polyp detection (%)	536 (21.8)	285 (20.9)	132 (21.2)
Mean no. polyps (range)	0.48 (0–20)	0.44 (0–9)	0.44 (0–9)
Mean no. polyps detected (where present) [median]	2.21 [2]	2.11 [2]	2.06 [1]

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Competing interests None declared.

PTU-221 DYSPHAGIA IN A DGH: IS THERE HISTOLOGICAL CORRELATION OF THE VISUAL DIAGNOSIS?

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Introduction Dysphagia is a clinically important indication of malignancy; as well as a symptom of Oesophagitis, Barrett's oesophagus (BO), and peptic strictures; all of which should be easily recognised at biopsy. Dysphagia in younger patients' may indicate Eosinophilic Oesophagitis (EO), which may only be visible on histology. The aim of this study was to review the demographics of patients undergoing endoscopy and if there was histological and visual correlation to help guide our investigation of dysphagia.

Methods A retrospective study including dysphagic patients attending endoscopy at Singleton or Morriston hospital between 1 January 2010 and 31 October 2011. Patients were reviewed to identify demographics, endoscopic findings and correlation between visual and histological diagnosis. Where biopsies were indicated in the endoscopy report results were cross matched with the histology results. Hiatus hernia was considered normal and unspecified mass was considered to represent a visual diagnosis of malignancy unless otherwise stated. Patients undergoing more than one procedure had each procedure entered as a separate data set.