

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 endoscopy<sup>1</sup> 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.<sup>2</sup> 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  $\chi^2$  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]

## REFERENCES

1. **Valori R**, Barton R. *BSG Quality and Safety Indicators for Endoscopy*. The Joint Advisory Group on GI Endoscopy. 2007.
2. **Cairns SR**, Scholefield JH, Steele RJ, et al. Guidelines for colorectal cancer screening and surveillance in moderate and high risk groups (update from 2002). *Gut* 2010;**59**:666–90.

**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.