PWE-067 WATER INSUFFLATION VS NARROW BAND IMAGING, WHICH MODALITY PRODUCES RELIABLE IMAGES OF TERMINAL ILEUM AT COLONOSCOPY?

doi:10.1136/gutjnl-2013-304907.356

¹M H Thoufeeq, ¹N Kumar. *Endoscopy/Gastroenterology, Peterborough and Stamford Hospitals NHS Foundation Trust, Peterborough, UK*

Introduction Terminal ileal (TI) images are reliable indicators of completeness of colonoscopy¹. Studies have shown that TI image provide more convincing than caecal images to verify completion of colonoscopy². Acquisition of TI images after water insufflation (WI) has been found to produce reliable images³. We wanted to identify if TI images after WI through the biopsy channel or narrow band images of TI produce more reliable as part of image documentation.

Methods 4 images of terminal ileum were captured using Olympus colonoscope ®. They were 1 captured with conventional white light endoscopy (WLE), 1 captured with white light endoscopy + water insufflation (WLEWI), 1 captured with narrow band imaging (NBI) and 1 captured with NBI + water insufflation (NBIWI).

Without informing that these were TI images, the 4 terminal images were sent to endoscopists by email along with an invitation to participate in a survey using survey monkey® portal. Using the survey the respondents marked each image as follows: not terminal ileum = 1, may be terminal ileum = 2, most likely terminal ileum = 3, definitely terminal ileum = 4.

Results 36 endoscopists completed our survey. 49% were gastroenterology Specialist registrar, 40% were consultant gastroenterologists and 11% were colorectal surgeons. Most of the respondents (n = 31) were from the UK, 4 were from the United States and 1 was from the rest of the Europe.

19.4% (n = 7) of respondents had colonoscopy experience of 1–2 years, 30.6% (n = 11) had colonoscopy experience of 3–5 years, 19.4% (n = 7) had colonoscopy experience of 5–9 years 30.6% (n = 11) had colonoscopy experience of more than 10 years.

Responses in Table 1:

Abstract PWE-067 Table 1

	WLE	WLEWI	NBI	NBIWI
Not TI (Score 1)	5.6%	0.0%	2.8%	2.8%
May be TI (score 2)	33.3%	16.7%	22.2%	8.3%
Most likely TI (score 3)	38.9%	22.2%	22.2%	22.2%
Definitely TI (score 4)	22.2%	61.1%	52.8%	66.7%

Conclusion Water insufflation on terminal ileum using the biopsy channel of colonoscope produce more reliable images compared to White light or narrow band images (NBI). Combination of NBI and water insufflation together produced the most reliable images.

Disclosure of Interest None Declared.

REFERENCES

- Cherian S, Singh P. Is routine ileoscopy useful? An observational study of procedure times, diagnostic yield, and learning curve. *Am J Gastroenterol* 2004; 99(12):2324–2329.
- Powell N, Knight H, Dunn J, Saxena V, Mawdsley J, Murray C *et al*. Images of the terminal ileum are more convincing than cecal images for verifying the extent of colonoscopy. *Endoscopy* 2011; 43(3):196–201.
- Baraza W, Brown S, Shorthouse AJ, Tiffin N, Hurlstone DP. Direct photographic documentation of ileal mucosa in routine colonoscopy is not an independent valid or reliable proof of completion: quality assurance issues for the national colorectal cancer-screening programme. *Colorectal Dis* 2009; 11(1):89–93.

PWE-068 DIAGNOSTIC YIELD OF SERIOUS DISEASE AND VARIATION IN ELECTIVE GASTROSCOPY RATES IN ENGLISH GENERAL PRACTICE: ANALYSIS OF ADMINISTRATIVE DATA

doi:10.1136/gutjnl-2013-304907.357

¹M Shawihdi, ²E Thompson, ³N Kapoor, ²G Powell, ²M Roughton, ³R Sturgess, ³N Stern, ²M Pearson, ¹K Bodger. *Gastroenterology Department, University of Liverpool; Aintree Health Outcomes Partnership; Digestive Diseases Centre, Aintree University Hospital, Liverpool, UK*

Introduction The optimum role for gastroscopy (OGD) in managing dyspepsia and detecting oesophagogastric cancer (OG-Ca) is controversial. UK general practitioners (GPs) serve a gatekeeper role in selecting dyspeptic patients for OGD. We reported that variation in rates of OGD at the level of GP practise populations is associated with OG-Ca outcome, specifically that low rates are related to risk of poor outcome.[1] We wished to show that GP practises with low OGD rates are likely to be operating more selective referral practise with higher yield of serious pathology.

Methods GP practises with ≥1 incident case of OG-Ca were selected, as described.[1,2] Using a two-year download of HES data we identified all elective OGD procedures and obtained practise data to calculate age-sex adjusted OGD rates. Practices were divided into OGD rate tertiles (Low, Medium or High). An algorithm was developed to analyse coded diagnoses for first OGDs, identifying most “serious” condition: (1) OG-Ca, (2) Major acid-peptic diseases, (3) Minor findings (e.g. gastritis), (4) Benign GI neoplasms, (5) Upper GI symptom codes, (6) Miscellaneous (all others). We compared age and proportions with serious disease (categories: 1–2) across the GP practise tertiles.

Results 587,256 patients had elective OGD from 6,513 practises serving an adult population of c.39 million. Overall, yield of OG-Ca was 2.1%, major acid-peptic diseases 11.6% and the remaining 86.3% were mainly minor pathologies or symptom codes. Mean OGD rate for Low, Middle, High practises: 4.4 vs 8.1 vs 12.9 per 1,000 population. No difference in age distribution of populations across tertiles. Mean age of patients undergoing OGD was highest for low tertile practises (60.2 vs 59.5 vs 58.4 yrs; p < 0.001) which had highest yield of serious disease: 16,595/108,679 (15.3%) vs 28,177/203,771 (13.9%) vs 36,026/274,806 (13.1%) (p < 0.001).

Conclusion Low referring practises appear to target slightly older patients and achieve higher yield of serious disease. Although higher yield may be more consistent with current guidelines, it may also indicate an increased risk of referral at a later stage in the disease process and of poorer OG-Ca outcome.[1]

Disclosure of Interest None Declared.

REFERENCES

- Shawihdi, M., *et al*. Gastroscopy rate in English general practise populations: association with outcome for oesophagogastric cancer. *Gut*, 2012. **61**(Suppl 2):A19.
- Shawihdi, M., *et al*. Emergency Hospital Admission as a Route for Oesophagogastric Cancer Diagnosis: A Marker of Poor Outcome and a Candidate Quality Indicator for Local Services. *Gastroenterology*, 2011. **140**(5, Supplement 1):S207.

PWE-069 FACTORS ASSOCIATED WITH REPORTED PAIN DURING COLONOSCOPY: A RETROSPECTIVE STUDY

doi:10.1136/gutjnl-2013-304907.358

¹N Rahman, ¹F A Cuisson, ¹L satkunanathan, ²O Shabir, ¹A Zaman, ¹S varma, ¹M A Zubir. *Conquest Hospital, St Leonards on sea, UK; General Surgery, Conquest Hospital, St Leonards on sea, UK*

Introduction Colonoscopy is generally perceived as being a painful procedure. Nonetheless, pain is a rather subjective experience for individuals and can be multifactorial. The aim of this study was to identify the predictors of pain during colonoscopy.

Methods 1824 consecutive colonoscopies performed in 2010 were identified. Data was retrospectively collected on gender, patients' medical co-morbidities, type and effectiveness of bowel preparation, medication used during the procedure, endoscopist's performance and endoscopic findings such as presence of diverticular disease. Logistic regression analysis was used to identify independent predictors of pain during the procedure.