colonoscopy. Further analysis of the reasons resulting in gender differences in CIR and the impact on morbidity and mortality due to missed pathology would be desirable.

Competing interests None declared.

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PMO-189 ANALYSIS OF FACTORS PREDICTIVE OF DEPTH OF INSERTION DURING DOUBLE BALLOON ENTEROSCOPY

doi:10.1136/gutjnl-2012-302514b.189

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Introduction For many decades the small bowel (SB) has represented a blind area for endoscopists, until the recent introduction of double balloon enteroscopy (DBE) allowing SB investigation and therapy. At times achieving deep insertion can be particularly challenging. The aim of this study was to determine factors that might influence depth of insertion during DBE.

Methods We retrospectively analysed 569 cases referred to our institute, a UK tertiary referral centre for DBE from February 2005 to October 2011. The maximum depth of insertion (MDI) was measured as described by May *et al.* History of abdomino-pelvic surgery, route of insertion, type of enteroscope, age, sedation or GA used and gender were considered influencing factors (IFs). Procedures were then divided into several subgroups according to the numbers IFs identified.

Results Out of 569 procedures reviewed, 399 cases were selected for this study (F:M=159:240, mean age: 56 years). The mean MDI was 212 cm. 274 procedures were approached via the oral route, P5 and T5 enteroscopes were used in 189 and 210 procedures respectively and 146 patients had a history of abdomino-pelvic surgery. MDI was significantly affected by history of surgery (p

Conclusion Our findings suggest that the MDI is significantly influenced by a history of abdomino-pelvic surgery, route of insertion and type of enteroscope used. Moreover the MDI tends to decrease if more than one factor is present. Based on these results, an estimation of likely insertion depth can be made prior to DBE and an appropriate strategy to achieve a successful outcome considered.

Competing interests A Murino: Grant/Research Support from: Research Grant in deep enteroscopy released by Imotec/Fujinon, M Nakamura: None declared, E Despott: None declared, C Fraser: None declared.

PMO-190 INVESTIGATING THE PREVALENCE AND CAUSE OF IRON DEFICIENCY IN A FAECAL OCCULT BLOOD POSITIVE, COLONOSCOPY NEGATIVE PATIENTS FROM THE UK COLORECTAL CANCER SCREENING PROGRAMME

doi:10.1136/gutjnl-2012-302514b.190

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Introduction Faecal occult blood test (FOBT) is a simple test, which detects small amounts of blood released from the gastrointestinal tract. Recently it has been adopted as discriminator test for the BCSP in the UK. A colonoscopy is strongly recommended when FOBT results test positive. At present there are no plans for further investigation of the source of blood loss in patients who have had a negative colonoscopy. The aim of this study was to identify the proportion of UK colorectal cancer screening patients with a positive FOBT and negative colonoscopy affected by iron deficiency (ID) or iron deficiency anaemia (IDA) and then to detect any source of blood loss in the upper GI tract or small bowel.

Methods 100 patients with a positive FOBT referred for a BCSP were prospectively enrolled in the study between January 2008 and September 2010. A full blood count and ferritin were acquired after a negative colonoscopy. Patients with identified ID or IDA were invited to have an oesophagogastroduodenoscopy (OGD) and small bowel capsule endoscopy (SBCE).

Results 100 patients (male: 70, female: 30) with a positive FOBT referred to our tertiary centre had a negative colonoscopy. 19 patients were excluded due to vegetarianism. Of the remaining 81 patients, 1 had ID and 3 had IDA (4.9%) and therefore underwent OGD and SBCE. In 2/4 patients both procedures were normal. Three superficial gastric antral ulcers and a few gastric erosions were diagnosed respectively in the other two patients (2.4%), while their SBCEs were negative. Both patients had a history of aspirin or NSAID usage.

Conclusion In this cohort of FOBT positive and colonoscopy negative patients from the UK BCSP, we found that the prevalence of ID and IDA was 4.9%. Of these four patients only 2 (2.4%) had positive findings when further investigated, but these could be explained by medication. If these patients are excluded from the analysis then OGD and SBCE post negative colonoscopy in FOBT positive patients cannot be recommended.

Competing interests None declared.

PMO-191 MISSED UPPER GASTROINTESTINAL CANCER AT ENDOSCOPY: CAN PERFORMANCE BE IMPROVED BY SPECIALISTS?

doi:10.1136/gutjnl-2012-302514b.191

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Introduction Upper gastrointestinal (UGI) cancer continues to have a very poor prognosis; it tends to present late and at an advanced stage. The best hope for long term survival therefore remains early diagnosis with radical treatment. There has been increasing interest recently in measuring the accuracy of UGI endoscopy in diagnosing cancer. Depending on the population studied published missed rates vary between 3% and 20%. We hypothesised that concentrating the practice of UGI endoscopy into specialist hands would reduce the rate of missed diagnosis.

Methods This is a historical cohort study. In 2001 our institution employed an UGI nurse endoscopist and concentrated the practise of UGI endoscopy into her hands and those of the only UGI surgeon in the hospital. Rates of missed cancer diagnosis were calculated for the 7 years up to and subsequent to 2001 by cross-referencing the regional electronic endoscopy reporting system and the regional UGI cancer registry. As in other similar studies, we defined a definitely missed cancer as one diagnosed within 1 year of previous endoscopy and a possibly missed cancer as one diagnosed between 1 and 3 years of previous endoscopy. Missed diagnoses were sub-classified as being due to endoscopist error, pathologist error or follow-up error.

Results From 1994 to 2001 a total of 13 589 UGI endoscopies were performed—of a total of 305 UGI cancers diagnosed in this time 30 (10%) were missed (22 (7%) definitely missed and 8 (3%) possibly missed). From 2002 to 2009 a total of 16 503 UGI endoscopies were performed—of a total of 344 UGI cancers diagnosed in this time 20 (6%) were missed (11 (3.2%) definitely missed and 9 (2.6%) possibly missed). There was a statistically significant ($p<0.05$) difference between definite miss rates but between total miss rates. The