# PWE-054 FLEXIBLE SIGMOIDOSCOPY PRIOR TO CTC WITHIN THE

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Introduction Patients with abnormal FOBt results within the Bowel Cancer Screening Programme (BCSP) are at increased risk of colorectal neoplasia and are therefore offered colonoscopy. Some patients, with significant co-morbidities, are not suitable for colonoscopy and are offered CT colonography (CTC) as an alternative. There has been concern that the insufflation tube used during this examination may obscure visualisation of low rectal lesions and this has been reported in the literature. At the West London Bowel Cancer Screening Centre all patients are offered a flexible sigmoidoscopy (FS) prior to CTC and our experience of this approach is reported in this abstract.

Methods All patients with an abnormal FOBt result, attending a Specialist Screening Practitioner (SSP) clinic between 4<sup>th</sup> January 2012 and 1st October 2013, and who were offered CTC and FS were identified. Their endoscopic and radiologial investigations were retrieved from the hospital electronic records system and the results recorded in terms of the adenomas and cancers identified.

Results 1544 patients were seen in an SSP clinic within the allocated period, and 73 (4.7%) of these were offered CTC. Of these 49 (67.1%) had a FS as the first investigation and 24 (32.9%) had a CTC as the first investigation. 10 (13.7%) refused FS and 14 (19.2%) had endoscopic investigations (12 FS and 2 colonoscopy) after the CTC, due to patient choice. 6 (8.2%) patients who underwent FS as the first investigation had subsequent colonoscopy without CTC, 5 as a large polyp requiring resection was found at FS and 1 following detection of a cancer. In 3 of these patients further adenomas were found at colonoscopy. In total 67 patients (91.8%) had CTC and in this group 12 (17.9%) had a subsequent colonoscopy as a result of the radiological findings. Of these 6 had a normal FS prior to CTC and 6 patients did not have a FS. In 8 cases (66.7%) the number of polyps seen on CTC was confirmed at colonoscopy, in 3 cases (25.0%) more lesions were found at colonoscopy than CTC and in 1 case (8.3%) CTC had identified more polyps than were seen at colonoscopy. 12 patients had FS after a normal CTC and no additional findings were seen on these examinations. No rectal lesions were identified at FS that were not seen at CTC. Overall 18 (24.7%) patients eventually had a colonoscopy.

Conclusion FS prior to CTC within the BCSP does not appear to be of value in detecting additional rectal lesions missed at CTC, althou gh the numbers in this analysis are small. Initial FS avoids the need for CTC in about 8% of patients, and so should be performed before CTC, but this benefit needs to balanced against the increased workload and inconvenience to patients. In those patients in whom the initial decision is to perform CTC a quarter will eventually require a colonoscopy.

Disclosure of Interest None Declared.

## PWE-055

### **BOWEL CLEANSING AGENTS ENHANCE READER** CONFIDENCE LEVELS WHEN EXCLUDING SIGNIFICANT FINDINGS AT CAPSULE ENDOSCOPY

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Introduction Capsule endoscopy (CE) is the first line of investigation for examining the small bowel (SB) mucosa. While standard preparation (SP) is more convenient for patients, mucosal visibility may deteriorate within the distal SB. Recent meta-analyses suggest that bowel-cleansing agents (BCA) can improve small bowel image quality (IQ). The influence of BCA compared to SP on reader confidence levels (RCL) when excluding clinically significant findings (CSF) has not been examined.

#### Methods

Aim

To compare RCL when excluding CSF and assessing IQ during reading following SP or BCA prior to CE.

We performed a retrospective analysis of SB capsule images of 100 consecutive patients who underwent a complete CE examination at our institution from Oct 2012 - Mar 2013. Patients had SP (intake of clear liquids for 18 h and 12 h fasting prior to the procedure without BCA) or BCA (21 of polyethylene glycol (PEG) or magnesium citrate (MC) in addition to SP). The participants' demographic and clinical data were collected and SB transit time (SBTT) calculated. A four point scale was used to assess IQ (grade 1 = <80% of mucosa visible  $\pm$  excessive debris  $\pm$  severely reduced brightness to grade 4 =  $\geq$  90% of mucosa visible ± mild debris± mildly reduced brightness). The SBTT was divided into quartiles (Q1-Q4) by time and the IQ score, RCL and number of CSF for each quartile were determined by a gastroenterologist experienced in CE, blinded to the preparation. Procedures were examined in randomised order.

Results 49 (49%) patients had SP (group A) while 51 (51%) had one of the BCA (39% had PEG and 61% had MC, group B). There was no significant difference in age (p = 0.87), sex (p = 0.57), indication (p = 0.25) and SBTT (group A:  $264 \pm 112$ mins vs. group B:  $233 \pm 100$  mins, p = 0.14) between groups. For each quartile, IQ scores were significantly higher for group B than A except in Q1 (Q1:  $3.7 \pm 0.7$  vs.  $3.5 \pm 0.6$ , p = 0.06; Q2:  $3.6 \pm 0.5$  vs.  $3.1 \pm 0.6$ , p < 0.0001; Q3:  $3.2 \pm 0.6$  vs.  $2.3 \pm 0.7$ , p < 0.0001; Q4:  $2.8 \pm 0.5$  vs.  $1.9 \pm 0.8$ , p < 0.0001). There was no difference in detection of CSF between group A and B (41% vs. 51%, p = 0.33, respectively). For each quartile, RCL for excluding significant findings were significantly higher for group B than A except in Q1 (Q1: 100% vs. 96%, p = 0.06; Q2: 96% vs. 73%, p < 0.0001; Q3: 88% vs. 33%, p < 0.0001; Q4: 77% vs. 20%, p < 0.0001). There was no significant difference in IQ or RCL between PEG or MC. 3 procedures (all SP) were considered unsatisfactory for IQ with recommendation to repeat these after BCA.

Conclusion BCA pre-capsule endoscopy significantly improve small bowel IQ and RCL when excluding CSF. Bowel cleansing appears to be an important parameter for optimising the qualitive aspects of CE reading.

Disclosure of Interest None Declared.

### PWE-056 DELIVERY OF BOWELSCOPE SCREENING - EXPERIENCE FROM THE PILOT SITES

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