

popularity globally. The delivery of an ER service requires specialist expertise and is therefore limited to a few centres in the UK. Here in Bradford, an ER service was established in 2007, and is delivered by a single operator. The aim of this study was to observe changes in our ER practice over time.

**Methods** This was a prospective study of all patients who had undergone ER between August 2007 and December 2012 in Bradford Royal Infirmary. Patients were referred by experienced consultants, from the same trust or neighbouring hospitals, and were considered difficult cases, due to lesion size and/or access. Data from every ER case were recorded into a spreadsheet and divided into upper gastrointestinal (GI) ER or lower GI ER. We recorded patient demographics, lesion size and site, sedation, outcome, complications, and lesion removal (whole/piecemeal). Cases performed before 2010 (pre-2010) were separated from those performed in or after 2010 (post-2010). Data were analysed separately for the 2 time periods and then compared.

**Results** There were a total of 245 ER cases over the study period (47 upper GI, and 198 lower GI).

The number of upper GI ER cases increased from 15, pre-2010 to 32, post-2010. The success rate improved over time from 87 to 97% and the complication rate fell from 26 to 6%. Complications included 1 gastric perforation and 5 cases of minor bleeding treated endoscopically. The mean doses of Midazolam (2.5 mg) and Fentanyl (30 mcg) remained the same over time; however cases performed under general anaesthesia (GA) increased sharply from 7% to 37%. Mean polyp size also increased from 14 to 18 mm, although the distribution of polyps in the upper GI tract remained the same over time, with around 50% found in the stomach. Whole piece removal increased from 53% to 66%, despite increasing polyp size.

The number of lower GI ER cases also increased substantially from 62, pre-2010, to 136, post-2010. Success rate improved from 92 to 95%, whilst the complication rate remained the same at 5%. Complications included 1 postpolypectomy syndrome and 6 cases of bleeding. Doses of Midazolam (1.5 mg) and Fentanyl (75 mcg) remained the same over time, and interestingly the use of GA in lower GI ER was considerably lower (<1%) compared to upper GI cases. There were no changes in polyp size (26 mm), polyp distribution or whole piece removal (40%) over time.

**Conclusion** Our results demonstrate an increasing use of ER for upper and lower GI lesions. Over time, and thus, with more experience the success rate and complication rate have improved. These results are in line with other studies, emphasising ER as a safe technique, which should be considered before surgery for managing large and difficult GI lesions.

**Disclosure of Interest** None Declared.

#### PWE-059 ENDOSCOPIC RESECTION OF GIANT COLONIC POLYPS – SIZE MATTERS!

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**Introduction** Colonic polyps sized 50 mm and above are traditionally treated by surgical resection. Endoscopic resection has now become increasingly common as the expertise of western endoscopists improves. There is very little published literature on endoscopic resection of these giant polyps.

We aim to evaluate the feasibility, safety and efficacy of endoscopic resection of giant polyps  $\geq 50$  mm in size.

**Abstract PWE-059 Table 1** Recurrence rates with polyps of different sizes

Recurrence	Size			
	$\leq 55$ mm	$\leq 60$ mm	$\leq 70$ mm	$> 70$ mm
21/90 (23.3%)	3/34 (8.8%)	7/54 (12.9%)	9/63 (14.2%)	12/27 (44.4%)
P = 0.002				

**Methods** Prospective cohort study. All patients who underwent endoscopic resection of colonic polyps  $\geq 50$  mm from 2007–2013 were prospectively entered into a database. We excluded all polyps with fibrosis related to previous intervention. All patients were tertiary referrals from experienced gastroenterologists. All procedures were performed by a single experienced endoscopist.

**Results** N = 124 polyps in 122 patients. Mean polyp size = 71 mm. Range 50–170 mm. 27(22%) in right colon and 97 (78%) in left colon. M:F ratio 1.1:1. All polyps were resected in a piecemeal fashion. The mean procedure time was 120 min (range 90 to 240).

The complication rate was 11/124(8.9%). All these patients required inpatient stay. There were 9 bleeds (3 immediate and 6 delayed), 1 post polypectomy syndrome and 1 case of split muscle fibres (clipped endoscopically). 1 case of immediate bleeding required surgery to control the bleeding. All the others were managed conservatively. 4 of the 9 bleeds required blood transfusion. The complication rate was independent of polyp size, resection technique or site of the lesion.

Follow up data was available for 90 polyps. The recurrence rate was 21/90 (23.3%). Of the 21 recurrences, 16/21(76%) patients achieved complete clearance with a further 1 to 2 endoscopic procedures. The recurrence rate was significantly dependent on polyp size and was not dependent on the resection technique or the site of the lesion. Recurrence gradually increased with an increase in polyp size up to 70 mm. Recurrence was seen in 3/34(8.8%) polyps  $\leq 55$  mm, in 7/54 (12.9%) polyps  $\leq 60$  mm, in 9/63 (14.2%) polyps  $\leq 70$  mm. However, in polyps  $> 70$  mm, the recurrence rate greatly increased to 12/27 (44%) (p = 0.002).

#### Conclusion

1. It is safe and feasible to endoscopically resect polyps 50–170 mm in size.
2. Recurrence is significantly dependent on polyp size.
3. Giant polyps resected endoscopically have a significant recurrence rate. The majority of these can be cleared by further endoscopic procedures. However, we believe that the recurrence rate in polyps above 70 mm is very high and surgery should be considered in these cases.
4. Complication rates are independent of size.

**Disclosure of Interest** None Declared.

#### PWE-060 POLYPECTOMY PRACTICES IN THE ENGLISH BOWEL CANCER SCREENING PROGRAMME

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**Introduction** Most polyps are  $< 10$  mm in size and a range of polypectomy techniques are available with wide variations in

Abstract PWE-060 Table 1

%	2010	2012	
CBF	15.2	23.0	OR = 1.67, CI: 1.61–1.72
CS	21.3	23.3	OR = 1.12, CI: 1.09–1.16
HBF	14.1	10.1	OR = 0.68, CI: 0.66–0.71
HS	41.0	31.1	OR = 0.65, CI: 0.63–0.67
EMR	8.5	12.5	OR = 1.55, CI: 1.48–1.62

practice. We aimed to examine the techniques employed for removal of <10 mm polyps in relation to polyp characteristics, completeness of excision, safety and changes over time.

**Methods** Data relating to removal of polyps <10 mm between Jan 2010 and Dec 2012 were retrieved from the national Bowel Cancer Screening Programme (BCSP) database. Categorical data was compared using  $\chi^2$ .

**Results** 147174 polyps were removed during 62679 colonoscopies. A range of techniques was used (cold biopsy forceps (CBF) 19.7%, cold snare (CS) 22.1%, hot biopsy forceps (HBF) 12.2%, hot snare (HS) 35.1%, EMR 10.9%).

EMR was used more frequently in the right colon compared to the left (14.3 vs. 8.3%, OR = 1.84, 95% CI: 1.78–1.90).

Most pedunculated polyps were removed using HS; this was lower in the right vs. left colon (69.6 vs. 88.3%, OR = 0.30, CI: 0.28–0.33). CS was most common for non-pedunculated polyps in the right colon (29.8 vs. 19.0% in left, OR = 1.81 CI: 1.76–1.85); whereas most common in the left colon was HS (34.8 vs. 22.5% in right, OR = 1.84 CI: 1.79–1.88).

Surgeons were more likely than physicians to use diathermy irrespective of site or morphology (65.6 vs. 56.5%, OR = 1.46 CI: 1.43–1.5).

In 60% of polyps removed completeness of excision was not histologically assessable. 21.2% were completely excised, 5.8% incomplete and 13% not stated. For non-pedunculated polyps, histologically-confirmed complete excision was more common after EMR (23.4 vs. 6.2%, OR = 1.16, CI: 1.08–1.25) compared to other techniques (CBF 17.7%, CS 15.1%, HBF 19.1%, HS 21.5%); for pedunculated polyps it was more common after EMR (42.3%) and HS (42.0%).

Complications were rare for colonoscopies (45227) where only polyps <10 mm were removed. 12 (0.03%) bleeding episodes required transfusion; rates for single and multiple polypectomy cases were 0.01 and 0.04% respectively (OR = 5.01, CI: 1.10–22.8). The HS technique was most commonly used. There were 16 (0.04%) perforations; 0.02% for single vs. 0.05% for multiple polypectomies (OR = 2.20, CI: 0.77–6.34,  $p = 0.13$ ). No technique dominated for single compared with HS for multiple polypectomies.

Between 2010 and 2012, use of CBF, CS and EMR increased, whereas HBF and HS decreased ( $p < 0.01$ )

**Conclusion** The removal of polyps <10 mm within the BCSP is safe, but histological evidence of completeness of excision is poor with all techniques. Wide variations in practice reflect the lack of evidence guiding these decisions, although use of cold resection techniques has increased over time

**Disclosure of Interest** None Declared.

#### PWE-061 SPLIT-DOSE MOVIPREP (LOW VOLUME PEG) AND AFTERNOON COLONOSCOPY: A STEP IN THE RIGHT DIRECTION

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Symptomatic cases	Picolax	Split dose Moviprep	Single dose Moviprep	Morning list	Afternoon list
Total cases	50	50	50	78	72
Caecal intubation	46 (92%)	48 (96%)	44 (88%)	72 (92.3%)	66 (91.6%)
Number of polyps detected	17	14	47	37	41
Good bowel prep	24 (48%)	28 (56%)	19 (38%)	24 (30.8%)	47 (65.3%)
Satisfactory bowel prep	19 (38%)	19 (38%)	21 (42%)	40 (51.3%)	19 (26.4%)
Poor bowel prep	7 (14%)	3 (6%)	10 (20%)	14 (17.9%)	6 (8.3%)
<b>Screening cases</b>					
Total cases	50	50	50	All screening cases were done in the morning list	
Caecal intubation	47 (94%)	48 (96%)	47 (94%)		
Number of polyps detected	81	64	73		
Good bowel prep	11 (22%)	37 (74%)	25 (50%)		
Satisfactory bowel prep	34 (68%)	12 (24%)	22 (44%)		
Poor bowel prep	5 (10%)	1 (2%)	3 (6%)		

Abstract PWE-061 Figure 1

**Introduction** Good bowel preparation is essential for optimal mucosal visualisation during colonoscopy. The aim of this retrospective study was to evaluate the efficacy of three types of bowel preparation – Picolax (sodium picosulphate), single dose Moviprep and split-dose Moviprep.

**Methods** Two groups of patients; bowel cancer screening and symptomatic patients – who underwent colonoscopy at our institution over a 12-month period were identified. Within the two groups, 50 patients receiving each type of bowel preparation were selected providing a total of 300. Data collected included subjective endoscopist rating of bowel preparation quality (good, satisfactory, poor), depth of insertion, timing of endoscopy and polyp detection.

**Results** In symptomatic patients, 94% prescribed split-dose Moviprep had good or satisfactory bowel preparation with an unadjusted caecal intubation rate of 96%. 80% prescribed single dose Moviprep and 84% prescribed Picolax received the same rating with a caecal intubation rate of 88 and 92% respectively. More afternoon colonoscopies received a 'good' bowel preparation rating (65.3 vs 30.8%,  $p$  value <0.001) and more polyps (52.6 vs 47.4%) were detected regardless of preparation type. Moviprep was associated with the highest polyp detection rate (61 vs 34%,  $p$  value 0.03). In screening patients, 98% prescribed split-dose Moviprep had good or satisfactory bowel preparation. 94% prescribed single dose Moviprep and 90% prescribed picolax achieved the same rating. There was no significant difference in caecal intubation or polyp detection within the screening group.

**Conclusion** Split-dose Moviprep and colonoscopy performed in the afternoon are two independent factors facilitating better bowel cleansing and higher polyp detection.

**Disclosure of Interest** None Declared.

#### PWE-062 TERMINAL ILEAL INTUBATION OVER A FIVE YEAR PERIOD; WAS IT USEFUL?

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**Introduction** The value of routine ileoscopy during colonoscopy is unclear, but intubation of the terminal ileum (TI) is considered to be the main method of confirming completeness of colonoscopy. TI intubation rates are variable and intubation is often omitted due to time constraints and the perception of little added diagnostic value. Our aim was to assess the diagnostic yield of TI intubation during colonoscopies at our institution.

**Methods** A retrospective study was undertaken at our institution. Colonoscopy data over a 5 year period (1<sup>st</sup> October 2007 to 30<sup>th</sup> September 2012), were retrieved from the Endoscopy Reporting System database (Unisoft, Enfield, UK). Patients with