67% used visual estimation to size polyps and 30% used the open forceps technique. There was a discrepancy in how respondents would position the scope and forceps to size the polyp with no statistical significance. 22% admitted they would not know which forceps were used in their department. Only 22% correctly identified the size of the OF (range 2 mm–8 mm).

Of those endoscopists who perform >500 LGI endoscopies/year, 50% used OF and 50% VE. This group were more likely to correctly size OF. Trainee endoscopists performing only 50–100 LGI endoscopies mostly used VE which raises the question of whether they correctly size polyps given their limited experience.

Conclusion This small observational survey shows that the majority of endoscopists are likely to be incorrectly sizing polyps at LGI endoscopy. The majority of our respondents use VE which has been previously shown to be inferior to the OF technique. However, as demonstrated in this survey, our endoscopy staff do not know the correct size of the OF. Incorrect polyp sizing at LGI endoscopy could have far-reaching consequences on CRC prevention. Further work should be considered to develop a standardized technique for polyp sizing at the time of LGI endoscopy and to determine if training should focus more on this important skill.

PTH-004 EFFICACY AND SAFETY OF ARGON PLASMA COAGULATION FOR THE TREATMENT OF RADIATION PROCTOPATHY

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10.1136/gutjnl-2019-BSGAbstracts.29

Introduction Argon plasma coagulation (APC) is probably the most commonly used endoscopic treatment utilised for rectal bleeding due to radiation proctopathy (RP) but there are concerns about its efficacy and safety

Method Patients treated with APC for RP were identified from the endoscopy unit software database (Unisoft) over a 6 year period from 2011–2016. The case notes of each patient were obtained and the electronic patient record was also scrutinised in regard to symptoms, response to treatment and any complications.

Results 31 patients were identified that had APC for RP (median age 72, range 49–82) with all the 27 male patients having had radiotherapy for prostate cancer. There were four women that had APC for RP, 3 having had radiotherapy for cervical cancer and one having had radiotherapy for anal cancer. 28 of the 31 patients were referred for lower GI endoscopy primarily because of rectal bleeding. The number of APC treatments ranged from 1 to 7 (see figure 1) but only 10/31 (32%) required more than 3 sessions. Rectal bleeding was documented to have resolved in 28/31. In 2 patients it was unclear if rectal bleeding had resolved but the endoscopy report stated for both patients that there were only minimal RP changes and there was no need for further APC. One patient did have some persistent minor rectal bleeding but this was not thought to relate to the residual RP and APC was not given. There was only one minor endoscopic complication with small rectal ulcers noted after APC but this was not symptomatic and resolved spontaneously by the time of repeat endoscopy. APC was

provided at a flow rate of 0.6L/min and a power setting of 30W for all patients.

Abstract PTH-004 Figure 1 Number of APC treatments

Conclusions This long-term retrospective study has shown that only 10/31 (32%) patients required more than 3 APC sessions for symptom resolution and that treatment was efficacious with symptom resolution documented in nearly all patients. There was only one minor complication of small ulcers in the rectum after APC but this was not symptomatic and resolved spontaneously. In summary, APC is an effective and safe treatment for RP but may need multiple sessions to provide symptom resolution. APC could be considered as an alternative to medical treatments such as Sucralfate enemas.

PTH-005 RELIABILITY OF POST-COLONOSCOPY COLORECTAL CANCER ALGORITHMS

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10.1136/gutjnl-2019-BSGAbstracts.30

Introduction Post-colonoscopy colorectal cancer (PCCRC) rate is an important metric of colonoscopy quality. The World Endoscopy Organisation (WEO) recently published a consensus statement advising review of PCCRC cases, to facilitate categorisation of PCCRCs into interval or non-interval cancers and determine their most plausible explanation. However, it is still unclear if the relevant algorithms are reproducible in real life practice, or how the respective plausible explanations are affected by factors such as reported adenoma location.

This study aims to test the inter-rater reliability for both categorisation of PCCRC and most plausible explanation of cause; it will also test whether altering the location of previously seen adenomas to neighbouring segments of the colon impacts on most plausible explanation categorisation.

Methods Colorectal cancer (CRC) cases diagnosed from January 2015 to December 2016 in a single trust were identified and each case was cross-referenced with online endoscopy and pathology databases to analyse cases of PCCRC. PCCRC definition was as per WEO consensus statement. Two assessors independently reviewed each PCCRC case, and agreement was measured using Cohen's kappa (k).

Results Among 527 patients with CRC, 35 cases of PCCRC were identified; mean age was 71 years (range 48–87) and 21 (60%) of cases were males.

Categorisation of most plausible explanations is seen in table 1. Consistent most plausible explanation was found in 33/35 cases, k = .903 (95% CI, .839 to .967), p < 0.0005.

Sub-categorisation into interval and non-interval types was consistent in 21/35 cases, $k = .417$ (95% CI, .305 to .529), $p < 0.0005$.

Altering location of adenomas to adjacent segments did not affect assessment of most plausible explanation in any of the cases.

Abstract PTH-005 Table 1 Most Plausible Explanation

Most Plausible Explanation	Assessor 1	Assessor 2
Likely incomplete resection of previously identified lesion	2	0
Detected lesion, not resected	3	4
Possible missed lesion, prior examination adequate	21	21
Possible missed lesion, prior examination negative but inadequate	7	8
Likely new CRC	2	2

Conclusions The inter-rater agreement for most plausible explanation of PCCRC is almost perfect, indicating that the WEO algorithm is reproducible in a real-world setting. Inter-rater agreement for categorisation of PCCRC was moderate, most likely reflecting the fact that patient notes were not reviewed in higher detail in this study, making intended interval times not always available to assessors. Altering adenoma location did not affect results, but larger sample sizes are required to assess this further.

PTH-006 **COMPLEXITY OF POLYPS IDENTIFIED VIA BOWEL SCREENING PROGRAMME IN NHS GREATER GLASGOW AND CLYDE**

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10.1136/gutjnl-2019-BSGAbstracts.31

Introduction Colonic polyps are a common finding in the bowel screening colonoscopy program (BCSP). Standard practice is to remove at index colonoscopy if possible. The SMSA polyp scoring system is a method of scoring the difficulty of polypectomy and is not currently recorded in routine practice in our institution. We wished to prospectively audit the spread of SMSA scores in polyps identified in BCSP colonoscopy in NHS Greater Glasgow and Clyde (GGC). Knowledge of the frequency of higher SMSA scores will allow resource planning for the volume of cases which need to be undertaken by an expert endoscopist. We also anticipated the exercise would be formative to our cohort of BCSP colonoscopists when assessing adenoma complexity.

Methods NHS GGC features 8 endoscopy units with BCSP colonoscopy performed at all sites. Between 1st November 2017 and 28th February 2018 we prospectively audited the spread of complexity of adenomas detected on bowel screening colonoscopy. We recorded SMSA polyp characteristics, endoscopic techniques used and the deferral rate and reason.

Results 626 records of polyp assessment were returned. 149 were excluded (outwith date window, invalid CHI, non-BCSP colonoscopy indication). 477 polyps were therefore included in the audit, from a total of 207 BCSP endoscopies. This cohort comprised approximately 30% of bowel screening colonoscopies undertaken during that time period. 16

Colonoscopists performed BCSP colonoscopy in the studied time-frame: 1 nurse endoscopist, 2 gastroenterologists, 13 colorectal surgeons.

The range of SMSA Scores for polyps was 4–17 (Median 6). 174 (36.5%) were level 1 polyps, 259 (54.3%) were level 2 polyps, 32 (6.7%) were level 3 polyps and 7 (1.5%) were level 4 polyps.

457 Polyps were removed at index colonoscopy (96%). Polypectomy deferral rates varied by SMSA level: 42.9% (3 of 7) for SMSA Level 4 polyps, 18.8% (6 of 32) for SMSA level 3 polyps, 1.5% (2 of 259) for level 2 polyps, and 4% (7 of 174) for level 1 polyps. The commonest reason for deferring level 1 and 2 polyps was failure to stop the patient's anticoagulant or antiplatelet medication.

Conclusion 8.2% of polyps detected on bowel screening colonoscopy were SMSA level 3 and 4. The majority of these were removed at index colonoscopy. It is uncertain whether removal at index procedure was uniformly the correct approach in patients with level 3 and 4 polyps and we require to do further research looking at completeness of excision. This audit was undertaken when Guaiac based faecal testing was being utilised by the bowel screening programme. Since the change to Faecal Immunochemical Test with a threshold of 80ug/g stool we have seen an increase in adenoma detection rates from 40% to 52% and therefore the spread of SMSA scores may have changed.

PTH-007 **ENDOSCOPIC REMOVAL OF ADENOMAS INVOLVING APPENDIX BASE IS TECHNICALLY FEASIBLE USING FULL THICKNESS RESECTION DEVICE**

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10.1136/gutjnl-2019-BSGAbstracts.32

Introduction Endoscopic resection of adenomas involving the appendiceal base is challenging and often technically impossible with resultant necessity for surgery. Endoscopic full thickness resection (eFTR) using the full thickness resection device (FTRD) is a novel technique for removing lesions in the colorectum unresectable by conventional methods. We report use of this technique and outcomes for adenomas involving the appendiceal base.

Methods Data was collected and analysed on patients who underwent eFTR of adenomas involving the appendix base in the UK from April 2015 – January 2019. Main outcome measures were technical success, procedural time, specimen size, R0 resection, endoscopic clearance, and adverse events including appendicitis, and need for surgery.

Results 10 cases were identified across 4 sites where eFTR was attempted for adenoma at the appendix base. Mean patient age was 68 years (range 57–78). 3/10 had previous attempts at EMR and 2/10 had prior appendicectomy.

In 9/10 patients the lesion was reached with the FTRD, with failure of insertion in 1/10 due to sigmoid diverticulosis. The procedure was technically successful in 9/9 patients. Median procedure time was 72 minutes (50–97) and median resection time 6 minutes (4–17). Antibiotics were given in all cases. Median hospital stay was 1 day (1–3).

Median specimen size was 26 mm (15–35), and full thickness resection was achieved in 7/9 and R0 resection in 6/9. In