### Abstract PTH-049 Table 1

Bowel preparation	Unsatisfactory	Sub-optimal	Satisfactory
Total number of colonoscopies (N = 2649 (%))	90 (3)	351 (12)	2208 (85)
Total number of procedures finding polyps (N = 1539 (%))	43 (48)	194 (55)	1302 (59)
% right	32.6	39.2	42.1
Mean number of polyps found for all procedures	1	1.2	1.5
Mean number of polyps found on the right side	0.32	0.48	0.62
Mean number of polyps found on the left side	0.66	0.75	0.85
Total polyps > 0.9cm (N = 525)	8	80	437
Average number of procedures find a polyp > 0.9cm	11.5	4.4	5.1
Completion rate overall %	85	99	98

**Conclusion** 15% of procedures in our surveillance population have sub-optimal or un-satisfactory bowel preparation, making the interpretation of the clinical guidelines difficult.

Patients who have sub-optimal or unsatisfactory preparation have a high proportion of further sub-optimal or unsatisfactory procedures. Endoscopy units should have a strategy for improving this.

In patients with sub-optimal or unsatisfactory bowel preparation there is a significant reduction in overall polyp detection which is particularly marked in the right colon. This does not appear to be the case with larger polyps.

In patients with sub-optimal or unsatisfactory preparation undergoing a complete colonoscopy, shorter surveillance intervals should be considered taking other patient related factors into account.

Disclosure of Interest None Declared.

PTH-050

WHAT DO ENDOSCOPISTS DO WHEN NO CANCER IS FOUND ON GASTROSCOPY DONE FOLLOWING AN UPPER **GASTROINTESTINAL TWO WEEK-WAIT REFERRAL WITH WEIGHT LOSS?** 

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**Introduction** For patients referred with suspected upper gastrointestinal (UGI) cancer under the 2 week-wait (2WW), it has been shown that 10.5% will have endoscopic evidence of malignancy, whilst 6.5% of patients may harbour malignancy elsewhere.1 For those patients with weight loss, a negative gastroscopy for cancer poses an important clinical question for the endoscopist. There are no consensus guidelines advising the most appropriate 'next-step' the endoscopist should make following patients referred with weight loss but have a negative endoscopy for malignancy.

Aim To evaluate local and national practise in endoscopist decisions when no UGI cancer is found on gastroscopy in 2WW referrals with weight loss.

Methods All 2WW referrals for suspected UGI cancer with weight loss were identified from the 2WW office over a 6 month period at a district general hospital. Endoscopy and imaging results were obtained from the respective computer software packages. Questionnaires were made available to British Society of Gastroenterologists members asking them to reveal their initial management preference at endoscopy in patients referred under the 2WW with weight loss where no upper GI cancer was found.

**Results** Of the 639 2WW referrals in 6 months, 140 (22%) had weight loss. 6/140 (4%) were found to have either oesophageal or gastric malignancy. 134/140 (96%) did not have cancer, whilst 91 (65%) revealed benign pathologies such as gastritis, duodenitis and hiatus herniae and 43 (31%) were normal. Of the 134 negative endoscopies, the endoscopist took the following actions; 16 (12%) had urgent CT abdomen/ chest organised (1 lung malignancy identified), 61 (46%) referred to an urgent Outpatient clinic and 40 (30%) were discharged back to GP. 17 (12%) follow up was to be determined by the list consultant.

71% questionnaire responses received were from consultants. 46% of responders' preference was to follow up in clinic, 39% organised an urgent CT scan, 18% an ultrasound scan and the rest a brief history to ascertain their preference. 10% discharged the patient back to the GP. 100% of responders had no local guidelines at their trust with regards to this group of patients, whilst 54% felt formal guidelines were warranted.

**Conclusion** Our study shows a large variation in practise amongst endoscopists and hence the potential to over or under investigate and its consequences. Formal guidelines seem warranted.

Disclosure of Interest None Declared.

## REFERENCE

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PTH-051 SAFETY AND EFFICACY OF COLONIC STENTS (SEMS) FOR LARGE BOWEL OBSTRUCTION FROM PROXIMAL **COLORECTAL CANCER** 

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Introduction Colonic stenting of proximal Colorectal Cancers (CRC) (lesions at splenic flexure or beyond) is technically challenging and currently out-favour as surgical techniques allow safe primary anastomosis on unprepared dilated colon. Consequently, randomised trials (RCTs) have only compared colonic self-expandable metal stent (SEMS) with emergency surgery for acute left sided obstruction. However, emergency surgery is associated with substantial morbidity and mortality.

Aim: To assess the safety and effectiveness of colonic SEMS for obstruction caused by proximal CRC.

Methods Retrospective case series by 2 Consultant Gastroenterologists between 2005 to 2012 was audited. All procedures were performed using Through the Scope (TTS) technique and fluoroscopic guidance. End-points were technical success (correct SEMS placement confirmed radiologically at time of procedure), clinical success (resolution of patient symptoms within 48 hrs), re-intervention, patient discharge and mortality.

**Results Demographics** 31 patients (Male: Female ratio 2.1:1); median age 85.5 years (range 40-92), mean ASA score 2.5. Indica**tions:** 84% (n = 26) were palliative and 16% (n = 5) were bridge to surgery. 48% patients had subacute obstruction, 10% had total obstruction, and extent of obstruction was unknown in 42%. Lesions were located at Splenic flexure (n = 15), Distal Transverse (n = 7), Proximal Transverse (n = 3), Hepatic flexure (n = 4), Ascending (n = 1) & caecum (n = 1).

**Procedural Success** Technical success was 100%. Clinical Success was 81% (n = 25) with these patients being successfully discharged without requiring any further procedures during their hospital stay. Re-intervention was required in 5 patients (16%) due to SEMS dysfunction; managed by re-stenting in 1 and colostomy in 3 patients (Bridge group). The remaining was a colostomy for the only perforation in series (3%). Further surgery was only required in the 2 patients within the bridge group who went onto have uncomplicated elective surgery with primary anastomosis.

Mortality There was no procedure related mortality (0%). All cause 30 & 90 day mortality was 13% & 38% respectively, all of which were in palliative group. Over a third were alive at 1 year (1 year survival of 35%) and a further 2 patients are alive but yet to reach the 1 year end point.

Conclusion Colonic stenting by experienced operators for proximal CRC using TTS can be performed successfully and safely. It negated the need for emergency surgery with successful discharge of 81% of patients. These results are important when interpreting the RCT, when considering palliation and the developments of neoadjuvant chemotherapy strategies in Bridge group.

Disclosure of Interest None Declared.

# PTH-052 MICROSCOPIC COLITIS IS EXPENSIVE TO DIAGNOSE: AN **ANALYSIS OF THE UTILITY OF RANDOM COLONIC BIOPSIES**

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**Introduction** Microscopic colitis is reported in up to 9.5% of patients with watery diarrhoea, and in almost 20% of those older than 701. The Joint Advisory Group on GI Endoscopy mandates diagnostic colorectal biopsies in patients with persistent diarrhoea. However, the Royal College of Pathologists advises that biopsies be taken only in the "correct clinical setting... usually in a middle-aged or elderly (often female) patient"2. We examined our local incidence of microscopic colitis and the cost of universal biopsies, and sought to identify factors that could be used to reduce the number of biopsies required.

**Methods** We performed a retrospective analysis of patients investigated for diarrhoea at West Middlesex University Hospital between 1/1/2011 and 31/12/2012, where colonic biopsies were taken to exclude microscopic colitis. The patient cohort, and their endoscopic and histological findings, were drawn from the hospital's electronic medical records. Patients whose biopsies were taken for inflammatory bowel disease assessment were excluded. Those patients with a new diagnosis of microscopic colitis were identified. The estimated cost of processing 4 colonic biopsies was £55.

Results 616 patients were identified who underwent biopsies to exclude microscopic colitis during the study period. The mean number of biopsies per patient was 3.1. A total of 2056 diagnostic colonoscopies were performed in our unit during this interval; biopsies for this indication were therefore required in 30% of cases. The cost of these biopsies was around £26,700. 9 cases of microscopic colitis were identified (median age 58; interquartile range 47.5-76.5; 3 males and 6 females), with an overall incidence of 1.5%. Incidence increased with age (see table). There were no significant differences between the patients with microscopic colitis and those with other diagnoses in terms of sex or number of biopsies.

# **Abstract PTH-052 Table 1**

Age range (years)	Incidence of microscopic colitis (%)	Cost per case of microscopic colitis (£)
< 35	0/130 (0)	N/A
< 40	1/186 (0.53)	8400
< 45	1/237 (0.42)	10700
< 50	2/301 (0.67)	6800
< 55	3/365 (0.82)	8200

Conclusion Biopsies for this indication are required in a high percentage of diagnostic colonoscopies, with significant resultant costs (£13,300 per annum). Our local incidence of microscopic colitis is far lower than that published in the literature, suggesting we may be over-biopsying. We could not justify restricting biopsies to female patients, but a minimum age criterion might be appropriate. Disclosure of Interest None Declared.

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PTH-053 HIGH DEFINITION (HD) VERSUS STANDARD DEFINITION (SD) WHITE LIGHT ENDOSCOPY FOR DETECTING EARLY NEOPLASIA (EN) IN BARRETT'S OESOPHAGUS (BO) **DURING SURVEILLANCE ENDOSCOPY. IS IT TIME TO CHANGE THE STANDARD OF CARE?** 

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**Introduction** HD endoscopy systems provide superior image resolution. However, the utility of this new and more expensive technology in lesion detection has not been evaluated so far.

Our aim was to assess whether using a HD endoscopy system translates to better outcomes compared to the SD system in terms of detecting EN in patients with BO.

Methods The study included consecutive patients with non-dysplastic BO undergoing surveillance endoscopy between September 2008 and August 2012. Procedures were performed at the Nottingham University Hospitals NHS Trust using Olympus video endoscopy system (240 and 260 series with SD and HD gastroscopes and monitors) across two hospital sites. Data was retrieved from the hospitals' endoscopy electronic database.

Patients' demographics, operator experience, endoscopy and histopathology findings were recorded. We excluded cases if other advanced imaging techniques were used or if cancer was diagnosed on index endoscopy.

Logistic regression was performed to estimate adjusted odds ratios (aOR) and 95% confidence intervals (CIs) comparing outcomes with HD and SD systems. Statistical models included the following potential confounders, chosen a priori based on the literature: number of biopsies taken; Male sex; trainee versus non-trainee endoscopist; HD versus SD system; BO length; and older age.

**Results** The database search revealed 946 procedures, out of those. 425 were excluded. Data was analysed for the remaining 521 procedures (HD group n = 255, SD group n = 266). Age and sex distribution was similar for both groups.

The HD system was superior to the SD system in the targeted detection of dysplastic lesions (aOR 3.27, 95%CI 1.27-8.40) as well as all dysplasia -random and target- (aOR 2.36, 95%CI 1.50-3.72). More false positive lesions (those with no dysplasia on target biopsies) were detected with the HD system (aOR 1.16, 95%CI 1.01-1.33) and it had a marginally higher yield of dysplasia on random biopsies alone (aOR 1.07, 95%CI 1.00–1.15). There was no benefit from the HD system in diagnosing all (random and target) high grade dysplasia (HGD) or cancers compared to SD endoscopy (aOR 0.93, 95%CI 0.83-1.04)

Trainee endoscopists, number of biopsies and male sex were also associated with a statistically significant higher yield of dysplastic lesions.

Conclusion The use of the HD endoscopy system is associated with better targeted and any dysplasia detection during surveillance endoscopies for BO and is independent of other factors. Endoscopists performing surveillance for BO should consider using HD endoscopes.

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