although images of the appendix orifice, tri-radiate fold and ileo-caecal junction (ICJ) are conventional markers for this, numerous studies have shown a lack of specificity confounded by variations in human anatomy. Terminal ileal intubation, with images of villiform mucosa, provides irrefutable evidence of completion but cannot always be achieved. We aimed to study the anatomy of the ICJ to determine the factors that may be relevant to documentation of proof of completion.

Methods The features of 69 embalmed cadaveric ICJ specimens were assessed, including gross morphology and the ileo-caecal angle. In addition, 100 consecutive colonoscopy videos performed by a single Bowel Cancer Screening colonoscopist showing ileal intubation were reviewed to determine ICJ morphology, time taken for ileal intubation and difficulties encountered.

Results The morphology of all cadaveric ICJs was categorised, with all except 2 being labial or papillary in type. The average angle of ileal entry into the caecum was 106 degrees (range 59–180). Both major ICJ types had on average a greater distance from the posterior caecal wall to the tip of the top lip compared to the distance to the lower lip, giving the ICJ an inferior tilt. In nearly half of the labial-type valves, the top lip overhung the bottom lip. On average, labial-type valves had thinner lips and a narrower vertical opening than papillary-type valves. These features could render a labial-type valve more difficult to visualise and intubate at colonoscopy.

In the colonoscopy videos, over a third of ICJs could not be fully visualised or categorised, with these having a lower rate of initial successful intubation than categorised valves. The median time taken for intubation was shorter for papillary compared to labial-type valves. Ileal intubation was faster in categorised valves when the appendix was visualised. It was also achieved more quickly in patients who were given buscopan pre-procedure.

Conclusions Appreciating the anatomical features of the ICJ should assist endoscopists to approach ICJs which can be difficult to navigate. Administering buscopan as pre-medication and visualising the appendix prior to attempting ileal intubation have both been shown to decrease the time taken for successful intubation.

PTH-065 SINGLE CENTRE EXPERIENCE OF SIMTOMAX, A POINT-OF-CARE TEST FOR COELIAC DISEASE, TO AVOID DUODENAL BIOPSIES

¹Pranav Vyas*, ²Victoria Appleby, ²Carol Firth, ²Sulleman Moreea. ¹University College Cork, Cork, UK; ²Bradford Teaching Hospitals Foundation Trust, Bradford, UK

10.1136/gutjnl-2018-BSGAbstracts.86

Introduction The British Society of Gastroenterology (BSG) guidelines recommend screening for coeliac disease in patients with iron deficiency anaemia (IDA) with coeliac serology; but states that if it hasn't been carried out or if the result is unavailable, duodenal biopsies should be taken if the patient is undergoing a gastroscopy. As the prevalence of coeliac disease in the UK is around 1% and 5% in IDA, majority of duodenal biopsies are negative. As biopsies are costly we have been investigating ways to avoid doing them without missing the diagnosis of coeliac disease. Simtomax is a finger prick test for coeliac disease that provides immediate results, hence shown to be valuable as a negative predictive test.¹

The aim was to evaluate the value of Simtomax pre-endoscopy to reduce the number of duodenal biopsies without missing the diagnosis of coeliac disease in our local population.

Methods Between May–December 2016 we obtained informed consent and performed 106 Simtomax tests on patients attending for a gastroscopy (OGD) with an indication of anaemia/weight loss prior to their endoscopy. Using our databases, we collected the following: patient demographics, coeliac serology (anti tTG/EMA) if done, OGD findings and duodenal biopsy histology.

Results 106 patients (M=38, mean age 62, age range 34–91; F=68, mean age 62, age range 18–95) had both a Simtomax test and an OGD. 101/106 had duodenal biopsies (endoscopist's discretion) and 52 (49%) had coeliac serology (anti tTG). With histology as the gold standard for the diagnosis of coeliac disease, prevalence of the disease in these patients with IDA/weight loss was 3%. The negative predictive value (NPV) of a negative Simtomax test was 96% and the NPV of a negative Simtomax AND negative coeliac serology was 97%. The positive predictive values were 11% and 33% respectively for these 2 tests. The sensitivity and specificity of Simtomax were 33% and 96%.

Conclusions In the current NHS climate every saving is welcome as long as patient care isn't compromised. Our study shows that around 50% of patients attending for an OGD for IDA/weight loss didn't have coeliac serology available at the time of the procedure, therefore requiring duodenal biopsies as per BSG guidelines. Using a point of care test with a high negative predictive value would save more patients from having biopsies, save money¹ and valuable time of endoscopists, nurses and histopathologists. Our study confirms the high NPV of the point of care test Simtomax and would save biopsies in 96% of patients who haven't had coeliac serology prior to endoscopy (a saving of around £100 per set of duodenal biopsies).

REFERENCE

1. BMC Gastroenterol. doi:10.1186/s12876-016-0521537

PTH-066 ASPIRIN, NSAIDS, AND DYSPLASTIC COLONIC POLYPS – LESSONS FROM BOWEL CANCER SCREENING

^{1,2}Ali Taha*, ¹Caroline McCloskey, ¹Theresa Craigen, ¹Debbie Callaghan, ¹Robert Diamant, ²Wilson Angerson. ¹NHS Ayrshire and Arran, Kilmarnock, UK; ²University of Glasgow Medical School, Glasgow, UK

10.1136/gutjnl-2018-BSGAbstracts.87

Introduction Studies on bowel cancer chemoprevention have been limited by the failure to distinguish between the activities of low-dose aspirin and standard non-steroidal anti-inflammatory drugs (NSAIDs). Also, little is known about the activities of these agents in bowel cancer screening programs. We, therefore, aimed to assess the numbers and sizes of polyps/cancers detected in bowel cancer screening of patients using low-dose aspirin (75-mg/day), NSAIDs, and controls.

Methods Guaiac peroxidase faecal occult blood test kits were sent to 71 026 local residents, aged 50–74 years, over the 12 calendar months of 2016: 38 799 subjects filled in and returned the kits. Those with positive kits (n=849) were interviewed and invited for colonoscopy. Their colonoscopic findings were classified according to their use of aspirin, NSAIDs, or neither. Only dysplastic or cancerous lesions were analysed. The Mann-Whitney test and Fisher's exact test were used as appropriate. Odds ratios were adjusted for age and sex by logistic regression.

Results DEMOGRAPHY: 528 subjects were colonoscoped at one single centre. The aspirin group (n=112) had 74 (66%) males and a median age of 68 years. The NSAID group (n=46) had 23 (50%) males and a median age of 58 years. The control group, not using either of these agents (n=370), had 207 (56%) males and a median age of 63 years ($p<0.001$ vs aspirin users; $p=0.012$ vs NSAID users). POLYPS: ASPIRIN vs CONTROLS. Polyps >5 mm were found in 21 (19%) subjects taking aspirin vs 99 (27%) controls [odds ratio, OR, 0.57; 95% confidence intervals, CI, (0.33–0.98); $p=0.042$]. Polyps >5 mm or cancer were found in 24 (21%) aspirin users vs 118 (32%) controls [OR, 0.50; 95% CI (0.30–0.84); $p=0.009$]. POLYPS: NSAIDS vs CONTROLS. Polyps >5 mm were found in 5 (11%) subjects taking NSAIDs vs 99 (27%) controls [OR, 0.36; 95% CI (0.14–0.86); $p=0.036$]. Polyps >5 mm or cancer were found in 6 (13%) NSAID users vs 118 (32%) controls [OR, 0.35; 95% CI (0.14–0.86); $p=0.022$].

Conclusions (1) In this bowel cancer screening program, subjects taking low-dose aspirin were older while those taking NSAIDs were younger than controls not using either of these agents. (2) After adjusting the odds ratios for age and sex, the use of aspirin or NSAIDs was associated with lower prevalence of dysplastic colonic polyps or cancers.

These results provide further evidence for the potential use of aspirin or NSAIDs for bowel cancer chemoprevention.

PTH-067

HIGH QUALITY COLON CLEANSING WITH NOVEL 1L PEG-BASED BOWEL PREPARATION NER1006 VERSUS CURRENT ALTERNATIVES

¹Richard Ng, ¹Cesare Hassan, ¹Jonathan Manning, ^{2,3,4,5,6}Michael Epstein. ¹Norgine, Harefield, UK; ²Aspire Bariatrics; ³Eli Lilly; ⁴Zx Pharma; ⁵Ferring; ⁶Otsuka

10.1136/gutjnl-2018-BSGAbstracts.88

Introduction Effective colonoscopy requires successful bowel cleansing. A segmental score of 2 on the Boston Bowel Preparation Scale (BBPS) is considered adequate for the detection of polyps >5 mm.¹ New data indicate however that lesion detection rates may improve further at higher levels of cleansing.²

Methods The NER1006 phase 3 studies had randomised patient populations and treatment-blinded central readers for standardised BBPS assessment in the overall colon [3–5]. This post hoc analysis of all three phase 3 trials compares high versus adequate cleansing quality with NER1006 versus its comparators, using the per protocol (PP) population. Patients (n=1521) aged 18–85 years took their bowel preparations either on the day before colonoscopy (DAYB), as overnight split dosing (NOCT and MORA), or in the morning of the day of colonoscopy (MORA).

All analyses were carried out using the statistical package R v3.1.3. Confidence intervals and t-test for each mean difference and two-sided P-values were calculated using Fisher's exact test.

Abstract PTH-067 Table 1

High Quality BBPS Cleansing Success (BBPS $\geq$ 2) in the Overall Colon and Right Colon:

Study	DAYB			MORA		NOCT	
Dosing regimen	Day Before Evening	Day Before Morning/Afternoon	Overnight Split	Same Day Morning Only	Overnight Split	Overnight Split	Overnight Split
Bowel preparation	NER1006	NaP+MgCit	NER1006	NER1006	2L PEG+Asc	NER1006	TS
Patients, N	172	207	220	218	232	233	239
Patients with Overall Bowel Cleansing Success, n (%)							
All Segments BBPS 2–3	111 (64.5)	100 (48.3)	211 (95.9)	200 (91.7)	208 (89.7)	208 (89.3)	210 (87.9)
1 or More Segments	20 (11.6)	6 (2.9)	82 (37.3)	83 (38.1)	57 (24.6)	76 (32.6)	84 (35.1)
BBPS 3	9 (5.2)	2 (1)	53 (24.1)	54 (24.8)	40 (17.2)	51 (21.9)	51 (21.3)
2 or More Segments	9 (5.2)	2 (1)	53 (24.1)	54 (24.8)	40 (17.2)	51 (21.9)	51 (21.3)
BBPS 3	9 (5.2)	2 (1)	53 (24.1)	54 (24.8)	40 (17.2)	51 (21.9)	51 (21.3)
All 3 Segments BBPS 3	2 (1.2)	0 (0)	33 (15.0)	37 (17.0)	23 (9.9)	28 (12.0)	29 (12.1)
All Segments BBPS 2–3: P-Value	<0.01	-	0.01	0.52	-	0.67	-
1 or More Segments	<0.01	-	<0.01	<0.01	-	0.63	-
BBPS 3: P-Value							
2 or More Segments	0.03	-	0.08	0.06	-	0.91	-
BBPS 3: P-Value							
All 3 Segments BBPS 3: P-Value	0.21	-	0.12	0.04	-	1.00	-
High Quality BBPS Cleansing Success (BBPS $\geq$ 2) in the Right Colon:							
Segmental BBPS 2–3	120 (69.8)	107 (51.7)	215 (97.7)	207 (95.0)	217 (93.5)	219 (94.0)	217 (90.8)
Segmental BBPS 3	8 (4.7)	1 (0.5)	54 (24.5)	54 (24.8)	32 (13.8)	53 (22.7)	53 (22.2)
BBPS 2–3: P-value	<0.01	-	0.04	0.55	-	0.23	-
BBPS 3: P-Value	0.01	-	<0.01	<0.01	-	0.91	-