

**Conclusion** AFI reduces time to detection in novice endoscopists and could be a valuable training tool for trainees to improve their skills in detecting dysplasia in a time efficient manner. Advanced imaging endoscopic techniques may therefore help trainee endoscopists more than experienced endoscopists.

**Disclosure of Interest** None Declared.

#### PWE-047 WHEN SHOULD I TAKE TERMINAL ILEAL BIOPSIES? EXPERIENCE FROM A SINGLE UNIT

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**Introduction** Terminal ileum (TI) intubation at colonoscopy may be useful in the investigation of patients with diarrhoea or possible inflammatory bowel disease (IBD).<sup>1,2</sup> The yield of TI biopsies is variable and there are no standards for current practice.<sup>2,3</sup> Furthermore, in the UK concerns remain regarding the potential for prion transmission.

**Methods** We aim to establish the yield of TI biopsies in a single unit. All TI biopsies recorded on the pathology system in a 3-year period were reviewed. Colonoscopy reports and case notes were reviewed to establish if biopsy results were clinically relevant (defined as altering management). Statistical analysis was performed using SPSS. P values were calculated using Fisher's exact test to show any difference in biopsy yield between normal and abnormal looking mucosa for each indication. The values were calculated for all abnormal biopsy results and clinically relevant biopsy results.

**Results** 129 TI biopsies were taken between September 2010 and September 2013, 49 (38%) male and 80 (62%) female. Mean age 44 years (s.d. 17.2). There were 29 (22.5%) cases of known IBD. 5 (3.9%) cases were completion colonoscopies after colorectal cancer surgery where TI biopsies are taken to prove a complete examination.

**Conclusion** We demonstrate that when investigating patients with diarrhoea, abdominal pain or IBD, if the terminal ileum is visually normal, biopsies do not add to the clinical picture. There is a higher yield of relevant biopsy abnormalities when the TI appears abnormal. We can recommend within our practice that visual assessment of a normal terminal ileum is adequate, thereby reducing unnecessary biopsies. This reduces the workload for pathology laboratories, reduces risk from

biopsies and improves patient care as normal results can be communicated sooner to the patient.

#### REFERENCES

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#### PWE-048 RECURRENCE RATES FOLLOWING PIECEMEAL RESECTION OF 2 CM ADENOMATOUS POLYPS

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**Introduction** Piecemeal endoscopic mucosal resection (pEMR) is a minimally invasive endoscopic technique for the resection of sessile/flat colorectal polyps (larger than 2 cm). It has been suggested that patients should have a check procedure at 3 or 6 months to ensure complete initial excision of the lesion, and subsequent colonoscopic surveillance at between 1 and 3 years to identify recurrence.

**Methods** This is a retrospective observational audit, including all patients with sessile/flat colorectal polyps of more than 20 mm in diameter who underwent pEMR in 2010, across 4 London Teaching Hospitals. Patients were either local or tertiary referrals. Data was obtained from colonoscopy and histology reports. The primary outcome measured was the follow up rate at first, check colonoscopy (3 months, 6 months or 1 year), and at the subsequent surveillance colonoscopy (1, 2 or 3 years). Recurrence rate at both check and surveillance was a secondary outcome. A high-risk recurrence was considered to be more than or equal to 10 mm and a low-risk recurrence less than 10mm.

**Results** 153 patients were included in the cohort; 53 (34.6%) patients were local referrals and 100 (65.4%) were tertiary referrals. 128 (83.6%) patients had a check colonoscopy and 74 patients (49.0%) had a surveillance colonoscopy. Adenoma recurrence occurred in 44 (34.4%) patients at check colonoscopy, with 3 (2.4%) polyps having high-risk recurrence, and in 12 (16.3%) patients at surveillance colonoscopy, with 3 (4.1%)

Abstract PWE-047 Table 1

Indication (n)	Ileoscopy abnormal			Ileoscopy normal			P value (all/ clinically relevant)
	Number	Biopsy abnormal	Clinically relevant	Number	Biopsy abnormal	Clinically relevant	
Diarrhoea (67)	15	11	9	52	7	3	<0.001/<0.001
Abdo pain (39)	12	9	8	27	3	2	<0.001/<0.001
IBD assessment (29)	12	10	9	17	3	3	<0.001/0.006
Other* (18)	2	2	1	16	3	1	0.194/0.284
Total# (129)	34	25	21	95	14	1	<0.001/<0.001

\*includes alternating bowel habit, rectal bleeding, low B12, iron deficiency anaemia, weight loss.  
#some had diarrhoea and abdominal pain so feature more than once.

Abstract PWE-048 Table 1

	Time from index	No recurrence	Low risk recurrence	High risk recurrence
Check colonoscopy	3 months (n = 92)	57	35	0
	6 months (n = 26)	18	5	3
	1 year (n = 10)	9	1	0
	<b>Total (n = 128)</b>	<b>84 (65.6%)</b>	<b>41 (32.0%)</b>	<b>3 (2.4%)</b>
Surveillance colonoscopy	1 year (n = 45)	36	6	3
	2 years (n = 25)	23	2	0
	3 years (n = 4)	3	1	0
	<b>Total (n = 74)</b>	<b>62 (83.7%)</b>	<b>9 (12.2%)</b>	<b>3 (4.1%)</b>

polyps having high-risk recurrence. Of the patients with recurrence at surveillance, 5 (41.6%) also had polyp recurrence at check colonoscopy, equating to failure to clear the initial recurrence in 11.4%. In 7 patients the check colonoscopy showed no recurrence.

**Conclusion** The rate of check colonoscopy within our cohort was high, but the rate of surveillance colonoscopy was low. The frequency of adenoma recurrence was considerable at the check colonoscopy, but much reduced at the surveillance colonoscopy. There was, however, a low rate of high-risk recurrence, suggesting that pEMR is an effective endoscopic technique to excise sessile/flat polyps as, in most cases, treatment of recurrence at the check colonoscopy was effective. A substantial proportion of individuals with recurrence at surveillance had recurrence at check colonoscopy, but recurrence was found at surveillance despite a normal check procedure. Strict adherence to follow-up protocols is, therefore, essential.

**Disclosure of Interest** None Declared.

#### PWE-049 AUDIT ON EMR OF LARGE COLONIC POLYPS (SIZE >20 MM)

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**Introduction** Large sessile colonic polyps are increasingly managed by endoscopic mucosal resection (EMR); a large multi-centre Australian study of 479 patients showed that 89% of sessile polyps were removed in a single session, 20% recurred of which 90% were successfully retreated.

**Methods** To assess success of EMR of colonic sessile polyps (2 operators, 1 centre), recurrence, complications and need for surgery.

68 patients Mean patient age 68.5 years; 70 sessile polyps (2 patients had 2 large polyps each); mean size 35 mm (range: 20–100 mm), underwent EMR 2009–2013.

Follow up: mean 11 months (range: 3–38 m).

Indications: 25% of patients from BCSP.

Site: rectum (46%), sigmoid (27%), descending (3%), transverse (7%), ascending (7%) and caecum (10%).

**Results** 4/70 polyps contained foci of adenocarcinoma. 1/4 with cancer had surgery and 11/70 await check endoscopy; thus, 47/59 (80%) had no recurrence at repeat endoscopy (including 3/4 with foci of cancer). Of 12/59 (20%) recurrences, 8 were retreated (2 required more than 1 re-treatment) and remain polyp free. 1 further recurrence is still under endoscopic FU.

**Surgery:** The remaining 3 recurrences had surgery (2 rectal, 1 caecal); the surgical specimen from 1 rectal recurrence contained

unsuspected cancer. The one patient who had surgery for a polyp-cancer showed no residual tumour in the operative specimen.

**Complications:** There were no deaths nor surgery required for complications. 13 (19%) procedural bleeding successfully treated (diathermy/clips); 1 perforated rectal EMR clipped and 1 post-polypectomy pain syndrome, both resolved with conservative management.

**Conclusion** Large sessile colonic polyps can be managed safely and effectively with EMR. We achieved 93% complete eradication of the polyps (8 after retreatment).

#### REFERENCE

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#### PWE-050 DEVELOPMENT OF A PERFORMANCE MANAGEMENT FRAMEWORK FOR BSW COLONOSCOPISTS

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**Introduction** The Bowel Screening Wales (BSW) programme has completed 12,000 colonoscopies since 2008. All Screening Colonoscopists are assessed, approved and quality assured by BSW. Colonoscopy is an invasive procedure with inherent risks. Complication rates in the BSW programme have occurred at expected levels but investigation has highlighted potentially preventable causes. We have developed a Performance Management Framework (PMF) to support colonoscopists where lesion assessment or therapeutic decision-making was associated with a pattern of adverse outcomes.

**Methods** A researcher (NH) conducted semi-structured interviews with BSW colonoscopists following active diary collection on BSW lists (Jan–Feb 2013). Narrative data was examined related to documented or recalled near-miss episodes or complications and evaluated alongside existing published case-control or cohort studies and BSW root-cause analysis data to inform the development of the PMF. The main criteria used in its development were; fairness, transparency, consistency of application, practicality and alignment to existing BSW QA frameworks (centralised data, feedback, QA visits and training). A draft PMF was presented to BSW Lead Colonoscopists in November 2013.

**Results** The framework comprises the following steps: 1) Identification of issues; 2) Investigation; 3) Observation; 4) Training. Issues may be identified from performance data, reported near-miss episodes, self- or peer-reported complications or from patient complaints. Investigations review all documentation, endoscopic images, pathology and radiology depending on the