

that traditionally quoted (1). The true complication rate of flexible sigmoidoscopy is of particular importance as the UK is introducing the Bowel Cancer Screening Programme (BCSP) by which all citizens will be offered the procedure at age 55.

Methods The aim of this study was to identify the morbidity and related healthcare costs of unexpected hospital attendance following outpatient flexible sigmoidoscopy. An observational study of A&E attendances and admissions occurring within 14 days of all outpatient flexible sigmoidoscopies which took place in 2011 was conducted. All procedures took place at West Middlesex University Hospital, London. Data was collected using the hospital's electronic records system, enterpriseCAMIS®. Cases were analysed to assess whether reattendance could be attributed to the procedure, and healthcare costs were determined.

Results Of the 1137 outpatient flexible sigmoidoscopies performed, 18 patients (1.58%) presented to A&E within 14 days. Only 2 of these attendances were thought to be related to the procedure (0.18%). 1 case resulted in a 5 day admission due to bleeding post polypectomy. The second A&E attendance was also due to bleeding. The cost of the above admission was £4,682. Including the related A&E attendance, the total financial burden of related reattendance following flexible sigmoidoscopy was approximately £4,827 in 2011. This equates to an additional cost of £4.25 per procedure.

Cost of hospital attendance within 14 days of outpatient flexible sigmoidoscopy (WUMH 2011, n = 1137):

Abstract PWE-033 Table

	Total A&E Attendances	A&E Attendances Related to procedure	Admissions Related to procedure	All episodes related to procedure
Number	18	1	1	2
Average Cost Per Attendance	£145	£145	£4,682	£2,413.50
Total Cost	£2,610	£145	£4,682	£4,827

Conclusion This study suggests outpatient sigmoidoscopy is relatively safe, with complications necessitating reattendance occurring following 0.18% procedures. The financial burden of hospital reattendance within our UK based study population was minimal, supporting the cost effectiveness of extending services for National bowel cancer screening programmes.

Disclosure of Interest None Declared.

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PWE-034 DIAGNOSTIC YIELD AND SAFETY OF 'BITE ON BITE' TUNNELED BIOPSY FOR SAMPLING OF UPPER GASTRO-INTESTINAL SUBMUCOSAL LESIONS

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Introduction Submucosal lesions are detected incidentally in a small proportion of diagnostic upper gastro-intestinal endoscopies. Endoscopic ultrasound guided fine needle aspiration (EUS-FNA) and endoscopic submucosal resection (ESMR) are useful diagnostic investigations for the assessment of such submucosal lesions with studies reporting diagnostic yields of 42% - 92% and 87% respectively.^{1,2,3} However, access to these techniques is usually limited to

specialist centres and they can have complications, with bleeding rates for ESMR ranging from 0–24%.³ The diagnostic yield with standard sized biopsy forceps is recognised as very low when assessing submucosal lesions.³ However, there is some evidence that this diagnostic yield might be increased to 17–38% by using a repeated “bite on bite” technique with larger capacity forceps.³

Methods We evaluated the diagnostic yield and safety of “bite on bite” tunnelled biopsy in diagnosing submucosal lesions found on upper gastro-intestinal endoscopy.

Data from 30 patients who underwent tunnelled biopsy was prospectively collected over an 18 month period. The acquisition of tissue required repeated biopsies consisting of 6 bites from the same point using a biopsy forceps with an open jaw diameter of 7mm (Radial jaw 4 large capacity, Boston Scientific).

Results 30 patients were included; (18 male, median age 60 years: range 31–79). The diagnostic yield on tunnelled biopsy was 7/30 (23.33%). Positive sample sites were: 4/12 oesophageal (1 mycobacterium tuberculosis, 3 leiomyomas), 0/13 gastric, 3/5 duodenal (1 pancreatic tissue, 2 endocrine carcinomas). No sampling led to bleeding requiring additional therapy to gain haemostasis. No patient required readmission with complications related to tunnelled biopsy within 30 days of their procedure.

Conclusion The tunnelled ‘bite on bite’ biopsy technique produced a low positive diagnostic yield of 23.33% when compared to EUS-FNA and ESMR. However, there were no complications with this method. Despite its low yield, tunnelled biopsy could still be considered as an initial diagnostic method for investigating incidental submucosal lesions as it is inexpensive to perform, safe and universally available.

Disclosure of Interest None Declared.

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PWE-035 THE INTRODUCTION OF A WEEKLY GENERAL ANAESTHETIC ERCP LIST IMPROVES DESIRED DUCT CANNULATION AND DUCT DRAINAGE RATES

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Introduction ERCP remains a key, but potentially complex endoscopic modality. ERCP procedures can be prolonged and consequently require higher dose and longer duration of conscious sedation. The use of anaesthetist-led deep sedation or general anaesthesia (GA) has been clearly demonstrated as a safe alternative to the use of conscious sedation^{1,2}. However, the effect of general anaesthesia on the success of ERCP has not been well studied. The aim of this study was to examine the impact of the introduction of a weekly anaesthetist-led GA ERCP list on the successful completion of ERCP.

Methods The data for all ERCP procedures performed within our unit was retrieved from the local endoscopic database covering the period one year before (BGA) and one year after (AGA) introduction of a weekly GA ERCP list in January 2012. Data regarding selective cannulation rates, patient and endoscopist demographics and complications were analysed. Success at ERCP was defined as selective deep cannulation of the targeted duct and the successful drainage of obstructed systems when required.

Results A total of 713 ERCP cases were examined. ERCPs were performed by 3 experienced endoscopists within a single endoscopy

unit. 357 cases were performed prior to regular GA list introduction and 356 cases after. There were 28 cases performed under GA in the BGA group and 81 in the AGA group ($p < 0.01$). There was no statistical difference in patient age or gender ratio.

Following the introduction of regular GA ERCP lists, the overall procedural success rate increased from 94.7% to 98.3% ($p < 0.01$). Procedural failure did not occur in any of the 109 cases performed under GA. Reasons for failure at ERCP were multiple, with sedation failure directly quoted in 3 of the 25 cases. Use of sedation reversal agents was lower in the AGA group (8 vs 1 cases, $p < 0.05$).

Conclusion The introduction of a weekly general anaesthetic ERCP list has improved desired duct cannulation and drainage success within our endoscopy unit. This advantage of anaesthetist-led sedation has not been previously demonstrated. The mechanism of improved success is likely to be multi-factorial in origin. Although agitation and sedation failure were cited in only a minority of procedural failures, we believe the increased control and safety afforded allows the endoscopist to successfully perform more challenging interventions. These data may support the wider introduction of anaesthetist-led sedation/general anaesthesia for ERCP.

Disclosure of Interest None Declared.

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PWE-036 CLINICAL PRESENTATION, CAUSES AND OUTCOME OF ULCERS IN ILEO-CECAL REGION: A PROSPECTIVE STUDY FROM A TROPICAL COUNTRY

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Introduction Ulcerations in the ileo-cecal (IC) region may have various causes and outcome, depending on the geographical region of the patients. Such data is scarce from tropical countries.

Methods To evaluate the clinical, endoscopic and histologic characteristics of ileocecal ulcers in a tropical country. Prospective study of consecutive patients undergoing colonoscopy, and diagnosed to have ulcerations in the IC region presenting at an tertiary care centre. All patients underwent endoscopic documentation. Biopsy was obtained and their clinical presentation and outcome were recorded.

Results Out of 1632 colonoscopies performed in our hospital from May 2010 to October 2011, 104 patients had ulcerations in the IC region. This population represents the study group. The median age was 44.5 years (range 18–85) and 59% were male. The predominant presentation was lower GI bleed (55.5%), pain abdomen +/-diarrhoea (36.3%), diarrhoea alone (9.9%), or miscellaneous (4.4%). Associated fever was present in 32 (31%) patients. On colonoscopy, terminal ileum could be entered in 96 (92%) cases. The distribution of ulcers was as follows: Ileum alone 40% (38/96), cecum alone 33% (32/96), and both ileum plus cecum 27% (26/96). In the 8 patients in whom ileum could not be entered ulcerations were present in the cecum and the IC valve. The ulcers were multiple in 98% and in 34% there were additional ulcers elsewhere in colon. Based on clinical presentation and investigations, the aetiology of ulcers was classified into infective causes (43%), non-infective causes (29%), and non-specific ulcers (28%) (Table). With infective cause, fever was significantly more common (47% vs 19%; $p < 0.01$) and cecum was preferentially involved (82% vs 45%; $p < 0.01$). Three patients (3%) died (all had presented with bleed and had non-specific ulcers), and 8 patients (8%) required surgical treatment. The remaining 93 patients (89%) had an uneventful recovery.

Conclusion Unlike in Western countries the most common (> 40%) cause of ulcerations of the IC region in the tropics is infections. Cecal involvement and fever are important clues to infective cause. These causes must be kept in mind while treating IC ulcers in patients from the tropics.

Disclosure of Interest None Declared.

PWE-037 "BEAR-CLAW" OR OVER-THE-SCOPE -CLIP SYSTEM (OTSC); A BREAKTHROUGH, SURGERY SPARING, ENDOSCOPIC DEVICE

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Introduction The "bear-claw" or over-the-scope clip system, OTSC (Ovesco Endoscopy, Tübingen, Germany) is a new clipping device developed for closure of large luminal gastrointestinal (GI) defects.

Methods To evaluate the clinical outcomes of patients treated with the OTSC a prospective, single-arm, pilot study was conducted in a regional hospital with tertiary care endoscopy. This study involved 11 clip applications in 10 patients (median age 76.2 years [range 52–89 years], 5 women) with GI defects from fistulas and anastomotic dehiscence and peptic ulcer bleeding.

Results Bleeding posterior duodenal wall ulcers ($n = 4$), bleeding gastric ulcer ($n = 2$), three fistulas or anastomotic dehiscences ($n = 4$) were treated using the OTSC-system. In addition a self-expanding metal stent was anchored securely in place with an OTSC-system. The diameter of ulcers and/or leaks ranged between 12 and 20 mm. A complete sealing of leaks was achieved in 3/4 patients. There were no clip complications. However, during introduction of the loaded clip on the tip of the endoscope, the hood tended to migrate over the scope, i.e. retracting, thus diminishing the exposed hood. This leads to diminished tissue suction and closure. Thus we modified the technique by tightly taping the hood on the tip of the scope. This trick may explain why all our cases were successful.

Conclusion The OTSC system is a useful device in a variety of clinical scenarios including the management of larger GI leaks, GI bleeding and stent anchoring, even in very old and frail patients.

Disclosure of Interest None Declared.

PWE-038 PATIENT CONTROLLED PROPOFOL – DO WE NEED AN ANAESTHETIST?

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Introduction Propofol is widely used during endoscopy but there remains controversy around its safety, if administered by non-anaesthetists. In a review of endoscopist-administered Propofol of 600 000 patients, only four deaths were reported. Patient-controlled Propofol sedation (PCPS) has been used during ERCP with lower sedation scores reported. We therefore piloted the use of PCPS in an unselected population attending for ERCP.

Methods PCPS was used in eleven patients undergoing ERCP. Propofol 8mg/ml and Remifentanyl 10mcg/ml was administered via a patient controlled pump, under the guidance of trained anaesthetic staff. Outcomes included completion and safety. Adverse events were defined as saturations < 90% or systolic < 90mmHg. Recovery was measured using the Aldrete score.

Results There was no difference between baseline demographics between the groups. In those undergoing PCPS, mean procedure