Results 195 patients (n=195, males 65%, mean age 58.6) underwent mediastinal EUS-FNA during the study period. Mean size of the lesions was 15.82 mm (range 3.9-43) in short axis and 28.23 mm (range 8-60) in long axis. Sub-carinal lymph nodes (LN) were the commonest (145/195, 70.3%) target lesions. Mean number of needle pass was 3.18 (range 1-6) and 22G (53.5%) was the commonest needle used. There were no procedure related complications or deaths. Of the 195 patients, FNAs were positive for malignancy in 61 (61/195, 31.2%), sarcoidosis in 40 (20.5%) and tuberculosis (TB) in 15 (7.6%) patients. Of the 64 (31.7%) cases where FNA was reported normal, 42 (65.6%) were accurate and 22 (34.3%) were inaccurate (final diagnosis: 8 cancer, 9 sarcoidosis and 5 TB). In 4 (2%) patients, FNA showed other diagnoses (3 anthracotic LNs, 1 sinus histiocytosis). Abstract PWE-221 table 1 Overall and condition specific results of mediastinal EUS-FNA.

Abstract PWE-221 Table 1

	EUS-FNA result (n)	Final clinical diagnosis (n)	Sensitivity (%), (95% CI)	Specificity (%), (95% CI)	PPV (%)	NPV (%)
Malignancy	61	74	82.4 (71.4 to 89.9)	100	100	90.2
Sarcoidosis	40	49	83.3 (69.2 to 92)	99.3 (95.7 to 99.9)	97.5	94.8
Tuberculosis	15	24	62.5 (40.7 to 80.4)	98.8 (95.3 to 99.7)	88.2	94.9
Other diagnosis	4	6	_	_	_	_
Overall	120	153	79.4 (71.8 to 85.5)	93.8 (82.1 to 98.4)	97.4	60.5

Conclusion Our large series on mediastinal EUS-FNA shows that it is an important and useful tool for the assessment of mediastinal lymphadenopathy of unknown aetiology and has overall high sensitivity (\approx 80%) and high specificity (\approx 94%). For sarcoidosis in particular, sensitivity (\approx 83%) and specificity (\approx 99%) of EUS-FNA is comparable to those for cancer.

Competing interests None declared.

PWE-222 AUDIT OF UPPER GI CANCER DIAGNOSIS BY ENDOSCOPY: ARE DIAGNOSES BEING MISSED?

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Introduction Gastric and oesophageal cancers have a high mortality rate, particularly if diagnosed at a late stage. We aimed to determine whether Upper Gastrointestinal (UGI) cancers are being missed either endoscopically or histologically in Leeds, and the reasons for any delays identified.

Methods As part of our rolling annual audit programme, histopathology records were gathered for all UGI cancers detected between September 2009 and August 2010 at Leeds Teaching Hospitals Trust. The endoscopy database was searched for endoscopies in the previous 3 years and the Trust Patient Pathway Manager reviewed for possible delays to diagnosis. Patients were classified into <1 month (m) from most recent endoscopy (delay not significant) and >1 m (possible significant delay). Previous biopsies were reviewed by a consultant histopathologist.

Results 211 cases of UGI cancers were detected (range 25–94 years, mean 70 years, 1.89:1 M:F) representing malignancy in 6.1% of 3460 endoscopies with gastric/oesophageal biopsy. Excluded from further study were: no endoscopy report (13); follow-up of previous diagnosis (38); not primary adenocarcinoma (12). 16/148 (10.8%) cases

had had endoscopy within the last 3 years, 6/16 (37.5%) had repeat endoscopy within 1m (mean delay 16.2 days). Reasons included: (2) suspicious endoscopy without histological confirmation of malignancy, (1) previous failed intubation, (1) follow-up of oesophageal ulcer. Of the 10 cases with previous endoscopy >1 m earlier, preventable delays were identified in six cases: Bleeding GU not biopsied at index endoscopy (42 days); failure to biopsy GOJ nodule due to triple anti-platelet therapy (91 days); a patient with known High Grade Dysplasia awaiting cardiology opinion before repeat under general anaesthetic (192 days); delayed surveillance interval for Barrett's Oesophagus (1035 days from previous endoscopy). Only in two cases was the cancer likely to have been missed on the first endoscopy: delayed follow-up after EMR, synchronous gastric carcinoma in separate site (180 days) and repeat endoscopy for symptomatic dysphagia (SCC in high oesophagus) (526 days). The other 4 cases had endoscopies unrelated to the subsequent diagnosis more than 2 years earlier and the delay was considered unavoidable. Review of previous biopsies, including further stains, showed that no malignant diagnosis had been missed.

Conclusion 6/148 (4.1%) patients had significant potentially avoidable delays to diagnosis of upper GI cancer. This is commensurate with audits in other centres. Most delays are systematic problems with bookings and appointments rather than endoscopic misses. We believe this simple rolling audit should be adopted as a mandatory Quality Assessment tool for MDTs and/or endoscopy units in order to improve delays in the diagnosis of UGI cancer in all hospitals.

Competing interests None declared.

PWE-223 GASTROENTEROLOGY INVESTIGATIONS FOR IRON DEFICIENCY ANAEMIA (IDA) IN PATIENTS WITH ACUTE CORONARY SYNDROME AWAITING CARDIAC INTERVENTIONS. HOW GOOD ARE OUR CARDIOLOGY COLLEAGUES?

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Introduction Anaemia is associated with increased risk of morbidity and mortality in patients with ischaemic heart disease (IHD) and heart failure. Incidental anaemia in patients awaiting coronary interventions is common particularly in our elderly populations. Currently there are no clear guidelines how to investigate these patients. The elderly patients have a higher RR of having occult GI malignancy and endoscopy is the gold standard to identify early disease. Majority of the physicians refer patients with anaemia to gastroenterologists routinely to exclude GI pathology. Endoscopic investigations are however not without complications and generally contraindicated during acute coronary syndrome.

Methods This is a retrospective analysis of patients with anaemia admitted with acute coronary syndrome to our hospital. Information was collected from patient records and endoscopy reporting database over a period of 2 years (January 2009–December 2010). We analysed all the investigations, outcomes/diagnosis of these patients. The data were analysed by Standard statistical methods. **Results** A total of 230 patients were identified by the coding department with anaemia and IHD who were admitted over a period of 24 months. However, only 61 (26.5%) patients were investigated for anaemia. The mean age was 70 ± 19 years with 77% (47/61) were more than 60 years of age. Serum Ferritin was checked in only 50% (31/61) of these patients before referral, out of which 71% (22/31) patients had low levels. Coeliac serology was done in only 5% (3/61) patients, which was normal. 75.5% (46/61) of the

referred patients underwent Oesophagogastroduodenoscopy (OGD), 13.04% (6/46) had non-erosive gastritis and 8.69% had peptic ulcer. Others had angiodysplasia, gastric erosions, gastric polyps and hiatus hernia in 4.3% each. OGD was normal in the rest; none had cancer or active bleeding. Colonoscopy was performed in 54.09% (33/61) patients and CT colonogram in 5%. Colorectal cancer was found 8.33% (3/36) patients, benign polyps in 5.55% and diverticulosis in 22%.

Conclusion A large number (73%; 169/230) of the anaemic patients with IHD were not referred to rule out gastrointestinal cause of anaemia. Coeliac serology is poorly checked by the Cardiologists. The prevalence of colorectal cancer was high that is, 8.33% in the small proportion of those referred. We suggest appropriate screening and thorough evaluation of anaemia in cardiology setting. This can be done by following British Society of Gastroenterology guidelines for investigation of iron deficiency anaemia. Education of colleagues would be of paramount importance in optimising appropriate referral practice.

Competing interests None declared.

Inflammatory bowel disease III <u>PWE-224</u> CHALLENGES IN RECRUITING TO CLINICAL TRIALS IN THE UK: THE TOPPIC EXPERIENCE

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Introduction The Trial of Prevention of Post-operative Crohn's disease (TOPPIC) is a multi-centre, randomised, Medical Research Council (MRC) funded, controlled trial of mercaptopurine (MP) vs placebo in preventing post-operative recurrence. It is the largest and only double-blinded trial conducted to date assessing thiopurine treatment in this setting. To complete the study in five centres we assumed that 60% of eligible patients would be enrolled into the study. Our experience of the challenges to recruitment has relevance to all other clinical trials in the area.

Methods Patients undergoing intestinal resection for Crohn's disease (CD) were prospectively recruited and randomised (1:1) within 3 months of surgery to either placebo or 1-1.5 mg/kg/day MP. 234 patients are sought to detect a 20% difference with 80% power between the two groups. The primary outcome means to assess the ability of MP to delay or prevent post-operative recurrence. This is assessed clinically at 12 study visits over 36 months and endoscopically at 12 and 36 months. Recruitment is due to finish in 2012.

Results The initial enrolment of patients was disappointing with only 60 patients recruited at 22 months (predicted 180 patients). Within the study centres anti-TNF use increased over the same period fivefold (p The study was therefore extended for a further 18 months from 5 Scottish centres, to involve 25 new sites across England and Wales. As of February 2012 223 patients have been randomised representing 20.5% of the 1085 patients undergoing resection at participating centres. Of those not randomised, 530 (49%) were ineligible and 243 (22%) declined pre-screening, 71 (6%) were ineligible/declined during screening. Of the 530 patients ineligible pre-screening 158 (30%) had a stoma, 110 (21%) were not included for reasons not specified, 55 (10%) had a condition the clinician felt placed them at unacceptable risk, 53 (10%) had MP hypersensitivity, 32 (6%) had no known diagnosis of CD, 28 (5%) failed to have ileocolonic resection within 3 months, 19 (4%) had active or untreated malignancy. The remainder 14% consisted of multiple other factors; including previous pancreatitis, and length small bowel resected. Of the 44 randomised patients whom have since dropped out since randomisation; 23 withdrew early from the trial, 13 were lost to follow-up, six other reasons not specified and one mortality from coronary heart disease.

Conclusion Our experience illustrates a number of challenges in investigator lead studies in IBD. Although we had accurately predicted the number of resections our initial projections had dramatically underestimated the proportion of patients willing or eligible to participate in a placebo controlled study. This study has however, highlighted the merits of multi-centre collaboration, not least due to the acceptance onto the NIHR portfolio.

Competing interests None declared.

PWE-225 EFFICACY OF FAECAL LACTOFERRIN IN IBS AND IBD: A COMPARATIVE STUDY

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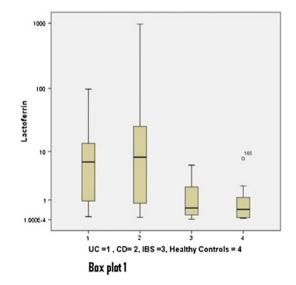
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Introduction Faecal lactoferrin (FL) has been proposed as a noninvasive diagnostic tool in IBD.¹ This is the first study conducted in a UK outpatient setting comparing simple colitis index (SCI) for ulcerative colits (UC) and Harvey Bradshaw index (HBI) for Crohn's disease (CD) against FL concentration in IBD and IBS patients.

Methods From an IBD outpatient clinic, stool samples were collected and concurrent disease activity recorded for UC, CD, IBS patients along with samples from healthy volunteers. Using IBD-Scan®, a quantitative ELISA, FL concentration was measured. Each participant's recorded clinical index at time of collection was compared against calculated FL concentration to assess clinical efficacy of FL in determining disease status in IBD and in differentiating IBD from IBS.

Results Spearman's correlation for correlation between LF and clinical score indices: 0.027 (p<0.05).

 $\ensuremath{\textbf{Conclusion}}$ FL is useful in staging of IBD and in differentiating IBD from IBS.



Abstract PWE-225 Figure 1 Lactoferrin plotted on a log scale for UC, CD, IBS and control groups respectively.