

cells stained is scored 0–5, a maximum Quick score per sample of 8. Differences in expression between HC and CD samples were analysed using Mann–Whitney U test.

Results Colonic biopsies from 20 HC and 20 CD patients were stained for NLRP3, ASC, Pyrin and Caspase-1 protein expression. All four proteins were expressed in HC and CD tissue. There were significant differences in expression of all 4 proteins when HC and colonic CD samples were compared (Abstract PTU-116 table 1).

Abstract PTU-116 Table 1 Difference in expression of inflammasome proteins

Protein	Quick score HC median (IQR)	Quick score CD median (IQR)	p Value
NLRP3	2 (2–5)	7 (6–7.5)	<0.001
ASC	5.5 (4–7)	7 (6–8)	0.02
Pyrin	6 (5–6.25)	7 (6–8)	0.05
Caspase-1	4 (3–5)	5 (4–6)	0.02

Conclusion The NLRP3 inflammasome is expressed in normal, healthy GIT mucosa and is upregulated in colonic tissue from CD patients with active disease. This suggests the NLRP3 inflammasome may play a role in mucosal immunity in CD patients.

Competing interests None declared.

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PTU-117 ANALYSIS OF THE INCIDENTAL DIAGNOSIS OF INFLAMMATORY BOWEL DISEASE MADE DURING THE SCOTTISH BOWEL CANCER SCREENING PROGRAMME

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Introduction The Scottish Bowel Screening Programme (SBSP) has been running in Scotland since March 2008 in patients aged between 50 and 74. The aim of this study was to quantify the number of new cases of inflammatory bowel disease (IBD) diagnosed as part of the SBSP in South East Scotland. The progression of these patients was also assessed.

Methods All the patients who had a bowel screening colonoscopy during the first 3 years of SBSP in South East Scotland were identified (screening population 800 000). Histologically confirmed cases of IBD were isolated and information like symptoms at the time of diagnosis, risk factors and initial treatment was collated. The severity of illness was retrospectively assessed using Harvey Bradshaw index and Mayo score for Crohn’s disease (CD) and ulcerative colitis (UC) respectively. The patients’ progress following diagnosis was also assessed.

Results 51 (1.4%) patients with IBD were diagnosed out of total 3655 procedures performed between June 2008 and April 2011. Of these, 12 (0.3%) patients had previous diagnosis of IBD and were excluded from study. In patients with a new diagnosis of IBD (n=39), significantly more males 30 (77%), with a mean age of 63 at diagnosis, were diagnosed with IBD than females (9–23%), (p<0.001), mean age of 67. 12 (30%) Patients were diagnosed with

CD, 16 (41%) had UC and 11 (28.2%) had IBD unclassified (IBDU). The disease location is shown in Abstract PTU-117 table 1. 26 (67%) patients were symptomatic at the time of diagnosis with a mean Mayo score of 2.4 for UC and a mean Harvey Bradshaw score of 1.4 for CD group. 34 (87%) of patients were in remission in the follow-up period of 6 to 30 months. 9 (23%) had no treatment, 19 (48.4%) had oral or topical mesalazine, 4 (10%) had oral steroids while 3 (7.6%) patients required both oral steroids and mesalazine. Five patients were unresponsive to initial therapy (2-CD, 1-UC, 2-IBDU). Among these, three patients required Azathioprine, two had steroids and one required methotrexate after developing inflammatory arthritis.

Conclusion In this cohort of 3655 patients, IBD was diagnosed in 1.1% of patients. This is in line with published data.¹ There was a preponderance of male patients. When assessed the majority of patients had previous symptoms and following diagnosis their IBD followed a benign course.

Abstract PTU-117 Table 1 Site of involvement on colonoscopy

Diagnosis	Rectum (n=11)	Rectosigmoid (n=14)	Left colon (n=2)	Pancolon (n=8)	Ileum (n=4)
UC	9 (23%)	3 (7.6%)	1 (2.5%)	3 (7.6%)	
CD	0	5 (12.8%)	0	3 (7.6%)	4 (10.2%)
IBDU	2 (5%)	6 (15.3%)	1 (2.5%)	2 (5%)	0

Competing interests None declared.

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PTU-118 A DIAGNOSTIC ACCURACY META-ANALYSIS OF ENDOANAL ULTRASOUND AND MRI FOR PERIANAL FISTULA ASSESSMENT

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Introduction Imaging modalities such as endoanal ultrasound or MRI can be useful preoperative adjuncts prior to the appropriate surgical intervention for perianal fistulas. We present a systematic review of published literature comparing endoanal ultrasound with MRI for the assessment of idiopathic and Crohn’s perianal fistulas.

Methods A meta-analysis was performed to obtain pooled values for specificity and sensitivity. Electronic databases were searched from January 1970 to October 2010 for published studies.

Results Four studies were used in our analysis. There were 241 fistulas in the ultrasound group and 240 in the magnetic resonance group. The combined sensitivity and specificity of magnetic resonance for fistula detection were 0.87 (95% CI 0.63 to 0.96) and 0.69 (95% CI 0.51 to 0.82). There was a high degree of heterogeneity between studies reporting on MRI sensitivity (df=3, I²=93%). This compares to a sensitivity and specificity for endoanal ultrasound of 0.87 (95% CI 0.70 to 0.95) and 0.43 (95% CI 0.21 to 0.69) respectively. There was a high degree of heterogeneity between studies reporting on EAUS sensitivity (df=3, I²=92%).

Conclusion From the available literature, the summarised performance characteristics for MRI and EAUS demonstrate comparable sensitivities at detecting perianal fistulas, although the specificity for MRI was higher than that for EAUS. Both specificity values are however considered to be diagnostically poor. The high degree of

data heterogeneity and the shortage of applicable studies precludes any firm conclusions being made for clinical practice. Future trials with improved study design (including prospective data collection and consideration of verification bias) may help to further clarify the role of MRI in the assessment and treatment response monitoring of perianal fistulas (particularly in patients with Crohn's disease).

Competing interests None declared.

PTU-119 THE IMPACT OF VARIOUS FACTORS ON BONE LOSS IN IBD PATIENTS TREATED WITH ORAL STEROIDS

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Introduction Many factors can contribute to bone loss in Inflammatory bowel disease (IBD) patients treated with oral steroids.

Methods To assess the prevalence and evaluate the impact of various factors on bone density in IBD patients treated with oral steroids. We conducted a retrospective study on 50 patients with ulcerative colitis (UC) and 40 patients with Crohn's disease. BMD of lumbar spine and femoral neck were measured by axial dual-energy x-ray absorptiometry scan (DEXA) in 57 patients, and that of forearm by peripheral DEXA scan in 33 patients.

Results 60% of all patients (n=55) had low BMD (8.8% were osteoporotic, 51% were osteopenic). The osteoporotics were predominantly (75%) patients with CD and were smokers. On the other hand, 63% of osteopenics had UC and 28% were smokers. Although most of males (80.7%) had low BMD (73.3% were aged <50 years), only one third of females below the age of 45 years had low BMD. Only five patients had BMI <19, the majority of these patients (80%) had low BMD. All of the osteoporotic CD patients had terminal ileum (TI) involvement, and nearly 60% of patients who underwent surgery for CD had low bone mineral density. Patients who had IBD for 10 years showed low BMD in 62.5%, while 54% of those with disease duration more than 10 years had low BMD. 40% of patients who were on steroid sparing agents had normal BMD. All of the osteoporotic female patients were aged >45 years and were not on bone protection.

Conclusion The high prevalence of bone loss in IBD patients treated with oral steroids is multifactorial. Disease type (CD), site of the disease (TI), disease severity (requiring oral steroids and surgical intervention) and low BMI seems to be the major variables and early bone protection is recommended especially in young men.

Competing interests None declared.

PTU-120 A REVIEW OF PATIENTS IN A SINGLE CENTRE WITH ILEAL POUCH-ANAL ANASTOMOSIS FOR ULCERATIVE COLITIS AND AN ASSESSMENT OF THOSE PATIENTS WHO REQUIRE ON GOING MEDICAL THERAPY

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Introduction Restorative proctocolectomy with ileal pouch-anal anastomosis (IPAA) is the surgical therapy of choice for patients with chronic ulcerative colitis. However IPAA is frequently accompanied by early and late complications. A proportion of patients require ongoing medical management which this study assesses.

Methods A prospectively collected hospital database of patients who were followed up after IPAA at a single centre was retrospectively reviewed. A review of all case notes was carried out to

assess surgical intervention prior to IPAA. All post operative complications were recorded and an assessment was made of those patients recommenced on medical therapy.

Results 102 patients' case notes were reviewed, (60 male: 42 female mean age 42 years SD of ± 12.01). The follow-up is ongoing and is currently between 2 and 193 months. The complications included anastomotic leak (n=4), incisional hernia (n=7), pouchitis (n=36), stenosis (n=15), pre pouch stricture (n=1), ileitis (n=2), enterocutaneous fistula (n=2), perianal fistula (n=6), pouch vaginal fistula (n=5), pouch ulceration (n=8). All patients prior to surgery had a histological diagnosis of ulcerative colitis, 4 patients were reclassified as having Crohn's or indeterminate colitis at further follow-up. There were 13 (12.7%) patients whom were recommenced on medical therapy, including sulphasalazine, budesonide, azathioprine, 6-mercaptopurine and infliximab. Patients who were on antibiotics were not included in these numbers. All patients who were reclassified as having Crohn's were recommended on medical therapy and seen in a joint gastro/surgical clinic.

Conclusion Long term anastomotic problems are common after IPAA. Most pouch patients do not require additional medical treatment other than antibiotics but 13% need continued complex medical therapy under the care of gastroenterologists and surgeons. Use of steroids is low. Diagnostic problems remain an issue.

Competing interests None declared.

PTU-121 COMPLIANCE WITH GUIDELINES ON VIRAL SCREENING AND VACCINATION OF PATIENTS WITH INFLAMMATORY BOWEL DISEASE (IBD)

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Introduction ECCO recommends screening IBD patients for immunity to or infection with varicella zoster virus (VZV), hepatitis B (HBV) and potentially HIV, hepatitis C virus (HCV) and tuberculosis (TB) to allow monitoring or treatment if patients require immunomodulatory therapy. Patients should be offered vaccination against VZV, HBV, human papilloma virus (HPV), pneumococcus and influenza where appropriate. We audited screening practice and the reported prevalence of prior exposure and vaccination in our IBD population.

Methods In 2010, IBD patients in our general gastroenterology clinics completed a questionnaire regarding prior VZV disease, HBV infection or vaccination, influenza, pneumococcal and HPV vaccination. Results for screening tests were checked.

Results *Patient characteristics:* 91 patients returned questionnaires. 46 were male; median age was 43 years (range 19–71). 61 had a diagnosis of ulcerative colitis, 30 of Crohn's disease. Current drug therapy included none in 13 patients, 5-aminosalicylic acid (5-ASA) drugs in 42, systemic corticosteroids in 6, purine analogues, anti-metabolites or calcineurin inhibitors in 25 and biological agents in 5. *Questionnaire responses:* see Abstract PTU-121 table 1. *Screening:* 70 patients were screened for VZV immunity and 10 had complete HBV screening (surface antibody, antigen and anti-core antibody). Levels of screening for HCV, HIV were low (18 and 3 patients respectively). TB screening was more comprehensive; 47 had chest x-rays and 2 had γ interferon release assays. Those on biological agents were more likely to have been screened for TB. Four patients reporting prior VZV disease had no evidence of immunity (out of 48 who were tested). Nine of the 15 reporting HBV vaccination were tested, 5 of whom were negative. The one patient with serology consistent with previous HBV infection had no recollection of such.

Conclusion Overall compliance with ECCO guidelines was low and sporadic among our population. Other groups have reported similar