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.

REFERENCES

1. Petrilli V, Dostert C, Muruve DA, *et al.* The inflammasome: a danger complex triggering innate immunity. *Curr Opin Immunol* 2007;**19**:615–22.
2. Martinon F, Agostini L, Meylan E. Identification of bacterial muramyl dipeptide as activator of the NALP3/cryopyrin inflammasome. *Curr Biol* 2004;**14**:1929–34.
3. Detre S, Saclani Jotti G, Dowsett M. A “quickscore” method for immunohistochemical semiquantification: validation for oestrogen receptor in breast carcinomas. *J Clin Path* 1995;**48**:876–8.

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

doi:10.1136/gutjnl-2012-302514c.117

¹M A Zahid,* ¹C Noble, ¹C W Lees, ¹J Satsangi, ²G Wilson, ³A Lessells. ¹Gastroenterology, Western General Hospital, Edinburgh, UK; ²Colorectal Surgery, Western General Hospital, Edinburgh, UK; ³Pathology, Western General Hospital, Edinburgh, UK

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.

REFERENCE

1. Louis-Auguste J, Cohen P, Martin J, *et al.* New diagnoses of inflammatory bowel disease during bowel cancer screening colonoscopy. *Gut* 2011;**60**:A217.

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

doi:10.1136/gutjnl-2012-302514c.118

¹M R S Siddiqui,* ²H Ashrafian, ¹P Tozer, ¹N Daulatzai, ³D Burling, ³A Hart, ²T Athanasiou, ¹R K Phillips. ¹Colorectal Surgery, St Marks Hospital, London, UK; ²Imperial College, London, UK; ³St Marks Hospital, London, UK

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