Abstract PTU-183 Table 1

	Potential Type 1 BAM		Potential Type 2 BAM		Potential Type 3 BAM	
SeHCAT result	Abnormal	Normal	Abnormal	Normal	Abnormal	Normal
	n = 8	n = 9	n = 27	n = 39	n = 18	n = 7
Median age	45	52	53	57	54	71
Sex (% female)	75%	89%	78%	64%	100%	57%
Average stool frequency per day	6	6	6	6	8	5

may particularly benefit from earlier use of SeHCAT scan. Clinical response to colestyramine in BAM was high, although data on long-term compliance/response was not available.

Disclosure of Interest None Declared.

PTU-184 UNLOAD THE BURDEN OF UNNECESSARY INVESTIGATIONS AND REDUCE THE DELAY IN DIAGNOSING BILE ACID MALABSORPTION (BAM)

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[1,*]B Kok, [1]R Malhotra, [1]A Mistry, [1]J Burdsall, [1]A Milestone, [1]R Ransford. [1]*Department of Gastroenterology, Hereford County Hospital, Hereford, UK*

Introduction BAM is an often forgotten cause for chronic diarrhoea and though it is easily diagnosed by means of the SeHCAT scan, the diagnosis is often made late in the day with SeHCAT used only as a third or fourth line investigation. In this observational study we aim to analyse the unnecessary investigations and chronological delay it took to diagnose BAM in our centre.

Methods All patients who underwent a SeHCAT scan between the period January 2009-June 2012 were identified. Patient notes were retrieved and blood results, radiological imaging and endoscopy procedures performed prior to SeHCAT scan were reviewed. An abnormal SeHCAT was defined by bile acid retention < 8%.

Results A total of 112 patients underwent a SeHCAT scan during this period. 4 patients were excluded due to unavailability of notes.

53 patients (49%) had abnormal SeHCAT results. All 53 patients had normal inflammatory markers (normal white cell count, C reactive protein < 5), 98% (52) had normal haemoglobin levels and 91% (48) had coeliac disease excluded by negative tissue transglutaminase antibodies. The median age at time of diagnosis was 52 years (range 26–80 years), 38 of the 53 patients being female. The average stool frequency was 7 times a day.

In these 53 patients, a total of 5 hydrogen breath tests were performed prior to SeHCAT, 4 of them normal. A total of 19 barium studies were performed prior to SeHCAT, 15 were normal. A total of 18 CT Abdomen/Pelvis were performed prior to SeHCAT, 13 were normal. A total of 21 flexible sigmoidoscopies were performed, all of them normal. A total of 24 colonoscopies were performed, 21 of them normal. All abnormal results from the above summary apart from 2 abnormal CT Abdomens (which were detected in patients who were post-cholecystectomy) were found in patients who were known to be at risk of Type I BAM (previous TI Crohn's disease/previous ileal resection/previous pelvic radiotherapy). This includes the 3 abnormal colonoscopies from patients with known Crohn's disease with histology confirming active Crohn's inflammation.

The average time from first clinic consultation to time of diagnosis was 4.8 months (range 2 – 34 months).

Conclusion There is a significant time delay in diagnosing BAM and the study confirmed our suspicions that patients with BAM often undergo a whole barrage of investigations which yield negative results. Patients with Type I BAM, however, seem to yield abnormalities in most other investigations which might throw physicians off course initially, resulting in further diagnostic delay. BAM certainly needs to be thought of earlier in all patients and it merits a consideration even in patients who appear to have active inflammatory disease.

Disclosure of Interest None Declared.

PTU-185 WHAT IS THE COST OF DUODENAL BIOPSIES IN PATIENTS WITHOUT SEROLOGICAL EVIDENCE OF COELIAC DISEASE?

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[1,*]B T Theron, [1]D Williams, [1]G Moran. [1]*Gastroenterology, Sandwell Hospital, West Bromwich, UK*

Introduction The BSG guidelines recommend anti tissue transglutaminase antibody (TTG) testing as a first line test for coeliac disease. Duodenal biopsies (D2) should be performed only after a positive serological test or a negative test with a high clinical suspicion. We aimed to analyse whether the indications for duodenal biopsies and current practise are in keeping with guidelines.

Methods This was a retrospective review of the electronic records of 171 consecutive patients who had had duodenal biopsies.

Results The indications for endoscopy were iron deficiency anaemia (IDA) (51%), weight loss (16%), diarrhoea (3%) and non-specific gastrointestinal symptoms (30%). Seventy (41%) patients had a TTG done prior to endoscopy, 5 patients (2.9%) had a positive TTG prior to a positive D2 biopsy. Sixty-five (38%) patients had D2 biopsies despite a negative TTG. Hundred and one patients (69%) patients had D2 biopsies without any serological testing prior to endoscopy (1 positive biopsy). Nine (5.26%) patients had a TTG checked despite negative histology. The excess cost incurred: for processing biopsies after a negative TTG was £3139.50 and TTG after negative histology was £126.£3430 would have been saved by carrying a TTG test in subjects having a negative biopsy.

Conclusion A significant proportion of duodenal biopsies are done in patients with a negative TTG. The diagnostic yield for coeliac disease in those with a negative TTG was zero. If BSG guidelines were adhered to, £6695 would have been saved in this cohort.

Disclosure of Interest None Declared.

PTU-186 12 MONTH OUTCOME AND PATIENT SATISFACTION WITH STRUCTURED GASTROENTEROLOGICAL EVALUATION FOR CHRONIC GASTROINTESTINAL SYMPTOMS FOLLOWING PELVIC RADIOTHERAPY

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[1,*]C C Henson, [2]J McLaughlin, [2]Y Ang, [3]C Babbs, [4]J Crampton, [4]M Kelly, [3]S Lal, [5]J K Limdi, [6]G Whatley, [1]R Swindell, [1]W Makin, [1]S E Davidson. [1]*Christie NHS Foundation Trust;* [2]*University of Manchester, Manchester;* [3]*Salford Royal Foundation Trust, Salford;* [4]*Wythenshawe Hospital;* [5]*Fairfield Hospital, Manchester;* [6]*Tameside Hospital, Ashton-under-Lyne, UK*

Introduction Seventeen thousand patients are treated with radical pelvic radiotherapy annually in the UK.50% develop chronic GI symptoms. The structured approach to management used in this service evaluation has been shown to identify treatable diagnoses and improve symptoms in the short term. We report the first 12 month outcome data for the effect of structured gastroenterological evaluation on symptom burden and patient satisfaction.

Methods Fifty-six patients with GI symptoms > 6 months after radical pelvic radiotherapy underwent structured gastroenterological assessment as part of a service evaluation. They were assessed using the following questionnaires: inflammatory bowel disease questionnaire(IBDQ); Vaizey incontinence questionnaire (VIQ); and the Common Terminology Criteria for Adverse Events (CTCAE) pelvic symptom questionnaire.12 month assessments were compared to the previously reported baseline and 6 month assessments to determine if the improvement in symptoms was sustained. Patient satisfaction with the service was assessed at 12 months by an in-house questionnaire.

Results Forty patients(71%)completed the 12 month assessment and 37(66%) completed the patient satisfaction questionnaire. The initial statistically significant improvement in GI symptoms from baseline to 6 months in parallel to GI evaluation was sustained up to 12 months in all questionnaires (IBDQ p = 0.019, IBDQB and CTCAE rectum bowel subset p < 0.0005) except the VIQ (p = 0.098). There was also a clinically significant improvement as defined by an increase in IBDQ score of ≥0.5 points per question. Median total IBDQ and IBDQB score increased by 25 and 11 points respectively between baseline and 12 months.97% of patients found the appointments convenient, 97% felt their problems were understood; 86% were satisfied with the outcome and 89% with the service. Dissatisfaction related to communication (n = 3), travel (n = 2) and ongoing symptoms (n = 3).

Conclusion The clinically and statistically significant improvement in GI symptoms found in parallel to structured gastroenterological evaluation for chronic GI symptoms following pelvic radiotherapy was sustained over 12 months follow up. These data suggest that structured investigation on the basis of the BSG guidelines can lead to a sustained improvement in symptoms and is acceptable to patients. Further research is essential to optimise patient care.

Disclosure of Interest None Declared.

PTU-187 IS PLASMA CITRULLINE CONCENTRATION A RELIABLE MARKER FOR DIAGNOSIS AND CLINICAL MANAGEMENT OF COELIAC DISEASE ?

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[1,2,*]C Papadia, [2]F Fonaroli, [3]F Lanzarotto, [4]M Salemme, [5]A Di Sabatino, [2]G de'Angelis, [4]V Villanacci, [5]G R Corazza, [1]A Forbes. *[1]Gastroenterology & Nutrition, University College London, London, UK; [2]Gastroenterology, Parma University Hospital, Parma; [3]Gastroenterology; [4]Pathology, Spedali Civili Brescia, Brescia; [5]Internal Medicine, IRCS San Matteo, Pavia, Italy*

Introduction In chronic villous atrophy plasma citrulline concentration (PCC) is decreased at the same severity and extent of mucosal lesions of villous architecture. Marsh-Oberhuber classification is conventionally used for grading villous atrophy in coeliac disease and a correlation with plasma citrulline concentrations has been found in pioneering studies. The Corazza-Villanacci classification gives better inter-observer agreement then Marsh-Oberhuber classification. Our primary aim was to correlate PCC to Corazza-Villanacci classification in coeliac disease. We aimed also to yield information in respect of PCC after one year of gluten free diet.

Methods Forty subjects with a diagnosis of acute celiac disease have been studied. Nine out of forty patients were on gluten challenge diet. All patients underwent OGD with multiple biopsies and a blood test for plasma citrulline concentration at baseline and after one year of gluten free diet (GFD). Routine haematological and biochemical investigations were performed including, IgA tTG, IgA EMA and IgA/G antigliadin, ESR, haemoglobin and haematinics, albumin, liver function tests and creatinine. BMI and clinical symptoms were monitored. Histology was interpreted according to Marsh-Oberhuber and Corazza-Villanacci Classification. Plasma citrulline concentration was analysed by High Performance Liquid Chromatography

Results Mean plasma citrulline concentration was lower (15.12 μmol/l) at baseline, in patients with active celiac disease, than in the same group of patients after one year of GFD (16.47 μmol/l) however we did not observe any overall change in citrulline concentration after one year of gluten-free diet. All patients were only partially histopathologically and clinically responsive to one year of GFD. Plasma citrulline concentrations correlated with Villanacci-Corazza classification (P = 0.05) in patients on gluten challenge diet. Patients with a score of 2 had lower citrulline values compared to those with a score of 1, on average 4 units. Correlation was not found between plasma citrulline concentrations and Marsh-Oberhuber classification at baseline and after one year of gluten-free diet.

Conclusion Plasma citrulline concentration may be considered a reliable marker of severity and extent of small bowel villous atrophy in acute coeliac disease, more data are warranted to determine its role in the long-term management.

Disclosure of Interest None Declared.

PTU-188 REPEAT VIDEO CAPSULE ENDOSCOPY- IS IT WORTH IT?

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[1,*]C Parker, [1]P Rajasekhar, [1]R Bevan, [1]C Davison, [1]S Panter. *[1]Gastroenterology, South Tyneside District Hospital, South Shields, UK*

Introduction Few studies have reported on the yield of repeat capsule endoscopy (CE) in the same patient; data regarding this diagnostic strategy are limited.[1,2] The aims of this work were to assess the indications for repeat capsule and to determine the diagnostic yield of repeat capsule in our trust.

Methods A retrospective review of all patients who underwent CE at South Tyneside District Hospital between August 2004 and October 2012 was conducted. Patients who underwent a repeat CE were identified and divided into one of four subgroups. Findings were classified as positive or negative; positive findings were taken as presence on report of ulcers, tumours, strictures, polyps, blood or angioectasia.

Results A total of 1083 studies were performed, 83 were repeat studies. 7 patients were noted to have greater than 2 repeats.

Indications

Group 1 Gastric retention or technical failure (N = 16)

Group 2 Surveillance (N = 7)

Group 3 Poor views (as commented on by reporting physician on report) or incomplete (not seen to enter the colon) on initial study (N = 31)

Group 4 Ongoing symptoms/assessment of disease extent/unclear findings on initial VCE (N = 36) (7 cases are reported in both group 3 and 4)

Yield Overall yield, excluding gastric retention was 38% for the first study and 46% for 2nd study, of those with an initial negative study (42 patients), 21% of these had a positive repeat. (those with poor views had been given bowel preparation, those with an incomplete capsule study had a capsule recording time of 8–9 hours on both studies).

Positive findings

Abstract PTU-188 Table

Group	Positive findings 1st study	Positive findings 2nd study
1	N/A	5/16 (31%)
2	4/7 (57%)	4/7 (57%)
3	3/31 (10%)	10/31 (32%)
4	16/36 (44%)	17/36 (47%)

Subgroup analysis group 4:

- Ongoing symptoms with consistent with ?Crohn's or known Crohn's the yield remains the same on 1st and 2nd capsule 4/9 (44%).