Abstract PTU-181 Table

Age	Patients	Normal duodenum (non-targeted biopsy)	Non- targeted biopsy, known CD	Non- targeted biopsy for other indication	Non-targeted biopsy to exclude CD	Non-targeted biopsy, giving new CD diagnosis
≤54	88	73	6	4	63	5
55–74	128	99	6	3	90	3
≥75	81	65	0	0	65	0
Total	297	237	12	7	218	8

significant pathology would be missed as a result. We therefore support the approach of tTG testing prior to endoscopy, to reduce unnecessary biopsies. No new diagnoses of CD were made in patients ≥75 years in our study.

Disclosure of Interest None Declared.

PTU-182 ABDOMINAL PAIN DISTINGUISHES IDIOPATHIC BILE ACID MALABSORPTION (BAM) FROM DIARRHOEA-PREDOMINANT IRRITABLE BOWEL SYNDROME (IBS-D)

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Introduction Current BSG guidelines for chronic diarrhoea recommend that patients aged < 45 with diarrhoea suggestive of functional disease (ie > 3 months duration, no weight loss, no nocturnal symptoms, intermittent symptoms) and normal basic investigations, do not require further investigation and have IBS[1]. This potentially disadvantages a population who might in fact suffer with idiopathic BAM. NICE guidelines however feature abdominal pain as one of the key symptoms for diagnosing IBS[2]. In this observational study we aim to assess whether abdominal pain can distinguish idiopathic BAM from IBS-D.

Methods All patients who underwent SeHCAT scan over a 30 month period January 2009-June 2012 were identified. Patient records and blood results/radiological imaging/endoscopy procedures performed prior to SeHCAT scan were reviewed.

Results A total of 112 patients were identified. 4 patients were excluded due to the unavailability of patient records. 53 patients (49%) had abnormal bile acid retention on SeHCAT (defined by < 8% retention). Of these 53 patients, 72% were female (n = 38) with a median age of 52 years (range 26–80) and average stool frequency of 7 times/day. 27 of the 53 patients (51%) had no known risk factors for BAM and the other 26 patients had risk factors (eg terminal ileal disease/ileal resection/post-cholecystectomy). Of the 55 patients classified as having normal bile acid retention (> 8% retention), 39 of the 55 (71%) had no known risk factors for BAM.

Of the 39 patients who had suspected idiopathic BAM but normal SeHCAT, excluding 12 patients where there was no clear mention of abdominal pain in the notes, 78% had abdominal pain as a prominent symptom (21/27) and 22% had no pain. Of the 27 patients who had suspected idiopathic BAM and abnormal SeHCAT, excluding 7 patients where there was no mention of abdominal pain in the notes, only 40% had abdominal pain (8/20) whereas 60% had no pain (Chi-squared, p = 0.008).

20 of the 53 patients with BAM were aged < 45 years old. 6 of these 20 had known risk factors for Type I BAM due to history of terminal ileal disease but the remaining 14 patients had no risk factors, fit criteria for functional disease, and could easily have been labelled as IBS-D.

Conclusion Our results highlight that a significant proportion of patients with chronic diarrhoea suffer from BAM. Younger patients cannot be assumed to have 'functional' symptoms and though the population is small, it does seem that idiopathic BAM patients might be distinguishable from IBS-D patients in that they usually do not experience abdominal pain.

Disclosure of Interest None Declared.

REFERENCES

1. Thomas PD *et al., Gut* 2003; 52 (Suppl V): v1-v15 – Guidelines for the investigation of chronic diarrhoea, 2nd edition
2. NICE guidelines on Irritable Bowel Syndrome (CG61) 2008

PTU-183 SEHCAT – CAST A WIDER NET

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Introduction Bile acid malabsorption (BAM) is a common cause for chronic diarrhoea in patients with risk factors. The diagnosis is usually confirmed by SeHCAT scan demonstrating lack of retention of radiolabelled bile acid. Treatment with bile acid sequestrants may improve diarrhoea symptoms. We report our experience of using SeHCAT in the investigation of patients with chronic diarrhoea and patient response to therapy.

Methods Over a 30 month period January 2009- June 2012, all patients who underwent a SeHCAT scan were identified. Patient records and blood results/radiological imaging/endoscopy procedures performed prior to SeHCAT were reviewed. An abnormal SeHCAT result was defined by bile acid retention < 8%. Equivocal results of 8–15% retention were regarded as normal.

Results 112 patients underwent a SeHCAT scan during this period. 4 patients were excluded due to unavailability of patient records. 53 patients (49%) had abnormal SeHCAT retention. In the remaining 55 patients bile acid retention ranged from 8.1% to 76.8%. BAM was diagnosed in 8 out of 17 patients with a possible Type I abnormality (terminal ileal disease/resection or previous pelvic radiotherapy), 27 out of 66 patients with a possible Type II abnormality (idiopathic) and 18 out of 25 patients with a possible Type III abnormality (post-cholecystectomy). Additional patient demographics are represented in Table 1.

The incidence for BAM was highest in the cohort of patients who were post-cholecystectomy, with 71% of all suspected Type III BAM patients having abnormal SeHCAT. However, in terms of absolute numbers, idiopathic BAM formed the highest proportion for abnormal SeHCAT.

Interestingly, a wide age variation was experienced across the three groups with proven BAM. The age range in Type I was 36–71 years, in Type II 37–74 years and in Type III 26–80 years.

57% of patients with proven BAM had documented improvement in their diarrhoea frequency and consistency on treatment with a bile acid sequestrant (eg colestyramine). Average reduction of stool frequency was from 7 times/day to 3 times/day.

Conclusion These results show that BAM is a relatively common problem. It occurs for a variety of reasons and should be thought of earlier in the investigative algorithm, independent of age. In our cohort, a history of post-cholecystectomy chronic diarrhoea was the most likely risk factor associated with BAM, hence this group

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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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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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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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.