

Abstract PTU-179 Table 1

	Combined solid & cystic pNETs (n = 54)	Solid pNETs (n = 44)	Cystic pNETs (n = 10)
Mean Age (yrs)	61.3	61.5	60.2
Sex (Male %)	AB59	AB64	40
Mean size of lesion in cm (range)	2.73 (0.7 – 9.5)	2.95 (0.7 – 9.5)	1.96 (0.8 – 5)
Sensitivity of CT/MRI in detecting pNET (%)	33.3 ¹ @	38.5 ¹ @	10 ¹
Sensitivity of EUS imaging in detecting pNET (%)	51.8 *	57 *	AB30
Sensitivity of EUS cytology in detecting pNET (%)	70.4 @	73 @	AB60
Sensitivity of combined EUS imaging and cytology in detecting pNET(%)	81.5 * ¹	84.1* ¹	70 ¹

Note: * p < 0.05, ¹ p < 0.05, @ p < 0.05 comparison within columns

Conclusion EUS & EUS-FNA is a useful test in diagnosing pNETs. Overall, the sensitivity of combined EUS imaging and cytology was significantly better compared to CT/MRI (p < 0.05) in detecting pNETs across all groups. Sensitivity of combined EUS imaging and cytology was significantly better compared to EUS imaging alone (p < 0.05) in the solid and combined pNET cohort of patients. Sensitivity of EUS cytology was significantly better compared to EUS imaging (p < 0.05) in the solid and combined pNET cohort of patients. Comparing the first 4 years to the second, there has been an increase in the number of cases of pNETs and statistically significant improvement in the diagnostic performance of cytology.

Disclosure of Interest None Declared.

Small bowel

PTU-180 BILE ACID DIARRHOEA – THE GOOD, THE BAD AND EQUIVOCAL RESPONDERS: A TWO CENTRE COMPARISON

doi:10.1136/gutjnl-2013-304907.270

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Introduction Bile acid diarrhoea (BAD) is a common cause of chronic diarrhoea, currently diagnosed using Se⁷⁵-homo-chloro-tauric-acid (Se⁷⁵HCAAT) testing, the “gold standard” in the UK and available to centres which support a gamma camera. Although the test has been available for over two decades, uptake has been slow despite its diagnostic value and evidence that treatment with sequestrants can be effective. This stems from a lack of formal clinical trials, which encourages a belief the good results reported may reflect patient selection, resulting in therapeutic nihilism. Thus the aim of this study was to compare treatment results between two centres: experienced (α), using data reported earlier, and novice (β), with current data.

Methods The patients recruited comprised those with structural disease (e.g. ileal resection, cholecystectomy), and non-structural, the majority with diarrhoea-predominant irritable bowel syndrome (D-IBS). Abnormal Se⁷⁵HCAAT results were defined as < 10% retention on Day-7. Response to treatment: 1st line (cholestyramine, colestid, colesitol) or 2nd line (colesevelam) was recorded in three categories: good, partial or poor.

Results

Centre α : 2001–2006; recruited n = 162; treatment assessed n = 129. Centre β : 2008–2012; recruited n = 126; treatment assessed n = 99. Response to treatment

Abstract PTU-180 Table

Response	Centre α	Centre β
Good	60 (47%)	40 (40%)
Partial	30 (23%)	23 (23%)
Poor	15 (12%)	10 (10%)

D-IBS – Abnormal Se⁷⁵HCAAT: centre α 33%, Centre β 31%.

Disclosure of Interest None Declared.

Conclusion

- Both centres had similar proportions with abnormal Se⁷⁵HCAAT values, suggesting gastroenterologists are able to select appropriate patients who are likely to benefit from the test.
- Treatment response in both centres was similar, ~70% responding. This suggests treatment is genuinely effective and not limited only to centres with a special interest.

PTU-181 THE LOW DIAGNOSTIC YIELD OF NON-TARGETED DUODENAL BIOPSIES

doi:10.1136/gutjnl-2013-304907.271

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Introduction Duodenal mucosa of normal endoscopic appearance is often biopsied (non-targeted biopsy) to exclude coeliac disease (CD) as the cause of iron deficiency anaemia or other symptoms. Our aim was to investigate the incidence of diagnosis of CD in non-targeted biopsies, in conjunction with tissue transglutaminase antibody (tTG) test results, in 3 adult age groups.

Methods Review of records of 297 consecutive patients having duodenal biopsy from July to October 2011. Age, indication for endoscopy, endoscopic appearance, tTG status and microscopy findings were recorded.

Results See table. Of 297 total patients, age range was 16–93 years. 60 biopsies (20%) were from endoscopically *abnormal* duodenum and 237 (80%) were from endoscopically *normal* duodenum, the latter including 12 from patients with follow-up of known CD and 7 with other clinical indication to biopsy normal duodenum. Therefore 218 (73%) were non-targeted biopsies with no indication to biopsy normal duodenum other than to rule out CD. 210 (96%) of the non-targeted biopsies were histologically normal or near normal with no features of CD & the remaining 8 (4%) had histological features consistent with CD. All 8 such patients had positive tTG results, 4 before & 4 after endoscopy, confirming the diagnosis of CD. 60 further patients from the 218 non-targeted group had tTG testing and all were negative. 65 (30%) non-targeted biopsies were from patients aged ≥ 75 years but CD was not newly diagnosed in this age group. 3 of the 60 patients with endoscopically *abnormal* duodenum had histological features consistent with a new diagnosis of CD and positive tTG (≤ 54 years = 1, 55–74 years = 2, ≥ 75 years = 0).

Conclusion The majority of duodenal biopsies were non-targeted. CD was identified in 4% of non-targeted biopsies, in tTG positive patients. Non-targeted biopsies did not show significant findings in tTG negative patients. Reduction in biopsy workload could be achieved if non-targeted biopsies were to be taken only in the setting of positive tTG or other relevant clinical indication; no

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)

doi:10.1136/gutjnl-2013-304907.272

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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 IBS¹. 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 IBS². 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

doi:10.1136/gutjnl-2013-304907.273

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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