bypass, cholecystectomy), symptoms, previous tests and outcomes of BAS were reviewed. Logistic regression was performed to determine predictors of BAM.

Results Patient age range was 18–85 years, median 50 years with the majority female (76; 63%). Of the patients investigated with SeHCAT scan, 78% had had a colonoscopy, 33% an OGD and 21% a CT scan.

Only Crohn's disease and right hemicolectomy were significantly associated with BAM. The frequency and nature (steatorrhoea or watery diarrhoea) of the stool was not significantly correlated with BAM.

The number of SeHCAT tests increased from 2 in 2009 to 62 in 2012. 57 (47%) had a positive scan of who 83% were given BAS post-test and of these 52% had a good response to therapy, 23% didn't respond and 10% couldn't tolerate the BAS. 14% of patients had a trial of therapy pre-test; 38% of these responded to therapy. 29% of patients given BAS weren't seen after treatment so response is unknown. Unsurprisingly of those with a negative SeHCAT scan ($n = 63$) only one patient had a partial response to treatment. Of these 6 were given treatment prior to their test. Only one had Crohn's disease and none had a right hemicolectomy so the trial of treatment in most was unnecessary.

Conclusion SeHCAT was often performed after many other investigations for diarrhoea. NICE guidelines suggest SeHCAT scan should be considered early in the investigation of chronic diarrhoea.

Of the SeHCAT scans performed, 57% were positive and could have prevented invasive tests if performed earlier. For patients with Crohn's disease or right hemicolectomy sensitivity and PPV was sufficiently high to warrant treatment without testing as per NICE.

REFERENCE

- 1 SeHCAT (Tauroselcholic [75Selenium] acid) for the investigation of bile acid malabsorption (BAM) and measurement of bile acid pool loss. <http://guidance.nice.org.uk/DT/8>

Disclosure of Interest None Declared.

PTH-109 MANAGEMENT OF BILE ACID MALABSORPTION (BAM) WITH LOW FAT DIETARY INTERVENTIONS

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Introduction BAM is the unrecognised cause for loose stool for 500,000 people in the UK. It is increasingly recognised as a potential cause of distressing gastrointestinal (GI) symptoms after cancer treatment. This study aims to evaluate the efficacy of low fat dietary interventions in the management of BAM.

Methods Patients with new onset GI symptoms after cancer treatment and a 7 day 23-selena-25-homochololytaurine (SeHCAT) scan <20%, were included in a prospective service evaluation. Patients were advised on a low fat dietary intervention by a Registered Dietitian, which aimed to provide 20% of total energy from fat. Patients rated their GI symptoms using a 10 point numerical rating scale, and completed 7 day dietary diaries, before and after dietary intervention. The dietary diaries were analysed using the dietplan6 dietary analysis programme. Significance of changes in symptom scores were analysed using

Wilcoxon signed-ranks test, change in dietary fat intake using a paired t-test.

Results 40 patients (20 male, 20 female) with a median age 61 (range 22–90) years were recruited. The cancer diagnoses were GI (28%), gynaecological (30%), urological (30%) and other (12%). 7.5% had borderline BAM (15–20% 7 day retention), 25% mild BAM (10–15% retention), 17.5% moderate (5–10% retention) and 50% severe (<5% retention). 62.5% of patients were taking a bile acid sequestrant. Symptoms reported were urgency (83%), bloating (43%), increased frequency (43%), lack of control (40%), abdominal pain (38%), nocturnal defaecation (28%), incomplete evacuation (25%) and greasy/pale stools (23%). After dietary intervention, the mean scores for all symptoms decreased. There was a significant reduction in mean ratings for urgency, bloating, lack of control, bowel frequency ($p = <0.01$), flatulence, abdominal pain, greasy/pale stool and abdominal gurgling ($p = <0.05$). Mean dietary fat intake reduced from 62.3 g of fat before dietary intervention to 42.2 g of fat after intervention ($p = <0.01$). There was no statistically significant change in dietary fibre intake.

Conclusion The use of low fat dietary interventions in patients with a SeHCAT scan <20% leads to clinically important improvement in GI symptoms and should be widely used.

Disclosure of Interest None Declared.

PTH-110 FACTORS PREDICTIVE OF BILE ACID DIARRHOEA AND LONG TERM TREATMENT OUTCOMES

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Introduction Bile acid diarrhoea (BAD) is a recognised cause of chronic diarrhoea, however detection remains sub-optimal. Knowledge of factors predictive of BAD could help improve detection. This study evaluates factors predictive of BAD (7 day SeHCAT retention <10%) and determines long treatment outcomes in those instigated on medical therapy.

Methods 515 patients underwent a SeHCAT test in a University hospital (2001–2012). Of these 41% (210/515) had evidence of BAD. Demographic data, clinical and biochemical indices were collected in all patients tested. Binary logistic regression was then used to determine factors predictive of BAD. 107 of the 210 (51%) patients with BAD were diagnosed between 2001–2009 and commenced on bile acid sequestrants.¹ In March 2013, these patients ($n = 107$) were re-contacted and reassessed either in a gastroenterology clinic or via telephone consultation, determining their bowel frequency, current symptoms, response to bile acid sequestrants and whether on continuing treatment. Comparisons were made in pre and post treatment variables using a paired sample t-test.

Results Binary Logistic regression identified only terminal ileal Crohn's, terminal ileal resection, previous small bowel surgery and cholecystectomy as predictors of BAD ($p < 0.0001$). With regards to follow up, 54% (58/107) of patients (median age 57 years, range 29–74 years, 42 females) were contactable and agreeable to follow up assessment. The mean time since diagnosis of BAM was 7.1 years, with a mean result of 3.6% at diagnosis. 38% (22/58) of patients were still on bile acid sequestrants at follow up, with 28% using alternative anti-diarrhoeal agents. In those who were on bile acid sequestrant therapy, mean stool frequency decreased from 7.3 stools per day to 3.9 ($p < 0.0001$). The 34% (20/58) of patients not receiving medical