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 (steatorrhea 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/CG78

**Disclosure of Interest** None Declared.

---

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

M Kurien*, JT Gleeson, C Osborne, I Messham, DS Sanders. Department of Gastroenterology, Royal Hallamshire Hospital, Sheffield, UK

10.1136/gutjnl-2014-307263.556

**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 term 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. 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 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
A single centre experience of treatment of refractory celiac disease type 2

B Zanini*, R Baschi, A Ferrarei, F Lanzarotto, M Manullo, C Ricci, A Lanini. Dept Clinical and Experimental Sciences, University of Brescia, Brescia, Italy

Introduction Refractory celiac disease (RCD) is a persistent malabsorption and villous atrophy despite adhering to a strict gluten-free diet (GFD) for at least 6–12 months in the absence of other cause. It is a rare complication of celiac disease (CD). RCD is classified based on the T-cells in the intraepithelial lymphocyte (IEL) morphotype into type 1 with normal IEL and type 2 with aberrant IEL. RCD1 is managed with strict nutritional and pharmacological management. RCD2 can be complicated by ulcerative jejunitis or enteropathy associated lymphoma (EATL), the latter having a 5-year mortality of 8–20%. It is therefore necessary to investigate and manage RCD2 which has a less predicted response and has a poor prognosis due to the associated complications. Treatment options vary due to the low incidence of RCD2 and hence the small numbers of randomised control trials.

We present a single centre’s experience in the treatment of RCD2.

Methods We performed a single centre retrospective study of all cases of RCD2 using the celiac database in a single centre between 2000 and 2013. Case notes, biological and histological data were reviewed for patients with a diagnosis of RCD2 diagnosed between 2000 and 2013. All patients were treated with prednisolone, 20 mg, and azathioprine, 2 mg/kg/day with repeat small bowel biopsy and T cell receptor analysis by PCR at 4 monthly intervals.

Results Fourteen out of twenty patients with RCD2 were successfully treated with prednisolone and azathioprine to become either type 1 refractory celiac disease, in 12 patients, or celiac disease, in 2 patients, with a better 5-year survival. None of the type 2 refractory patients developed lymphoma on this treatment.

Conclusion Prednisolone combined with azathioprine can be used successfully to treat RCD2. Our experience shows it is a safe and successful approach to improve prognosis. We successfully treated 7 out of 10 patients with RCD2 with this regimen.

Disclosure of Interest None Declared.