

**PTU-191 AN AUDIT OF TESTING FOR COELIAC DISEASE – ARE PATIENTS BEING INVESTIGATED APPROPRIATELY**

doi:10.1136/gutjnl-2013-304907.281

<sup>1</sup>F Leet, <sup>1</sup>S G J Williams, <sup>2</sup>P Bradley, <sup>3</sup>J Butcher. <sup>1</sup>Gastroenterology; <sup>2</sup>Clinical Audit; <sup>3</sup>Haematology, Ipswich Hospital NHS Trust, Ipswich, UK

**Introduction** Coeliac disease is a common condition, affecting up to 1 in 100 individuals in the UK. The average age of diagnosis is now over the age of 40 with 20% of newly diagnosed cases being over 60. In those over 60, the delay in diagnosis may be particularly long. The purpose of this audit was to evaluate the appropriate use of tissue transglutaminase (tTG) and duodenal biopsy in the diagnosis of celiac disease in a cohort of DGH patients analysed retrospectively.

**Methods** 114 consecutive patients with a reactive anti tTG > 3 were identified from the Ipswich Hospital Pathology laboratory database between January and June 2011. Those with an anti tTG titre > 7 have positive results in our laboratory. The cohort was divided into positive and negative groups. The duodenal biopsy (DDB) results of the positive group were documented. If the patient had not had a DDB the notes were reviewed or relevant clinician contacted. The negative group's IgA level was recorded to determine the likelihood of a false negative result.

**Results** Of 114 patients identified from the database with an anti tTG ≥ 3, 69 were female and 45 male. There were 63 positives and 51 negatives. In the positive serology group, 48 patients were already known to have coeliac disease, 4 had a negative biopsy and 11 have not had a DDB. Of these 11 patients only 2 had been referred to gastroenterology, 3 had been given a diagnosis of coeliac disease without a DDB and 6 had not been informed of their results. In the negative serology group 19 (16 adult and 3 children) were known to have coeliac disease and were on a gluten free diet. Of the remaining 27 adult patients, only 7 (26%) had had their IgA checked, while only 3 of 5 children had had their IgA tested. 2 of these 3 were IgA deficient. The other 2 had not been tested. None of the IgA deficient cohort had undergone a duodenal biopsy to exclude a false negative result.

**Conclusion** The results of this audit demonstrate inconsistent application of the national guidelines<sup>(1)</sup> for the diagnosis of celiac disease. Of greatest concern was the cohort of adult patients who were labelled as having coeliac disease without a confirmatory biopsy. There was also a significant cohort of IgA deficient patients in the negative group who may have had celiac disease. There is clearly a need for further on-going education of all healthcare professionals regarding appropriate testing to diagnose coeliac disease to ensure appropriate treatment and prior to labelling an individual with a lifelong diagnosis.

**Disclosure of Interest** None Declared.

**REFERENCE**

1. Ciclitira P J, Dewar D H, McLaughlin S D, Sanders DS (2010) The Management of Adults with Coeliac Disease, British Society of Gastroenterology

**PTU-192 ROLE OF THE 75SEHCAT SCAN IN EVALUATING CHRONIC DIARRHOEA**

doi:10.1136/gutjnl-2013-304907.282

<sup>1</sup>G Diana, <sup>1</sup>A Jawhari. <sup>1</sup>Gastroenterology, Nottingham University Hospital, Nottingham, UK

**Introduction** 75Se-HCAT nuclear medicine scanning is used to diagnose Bile Salt Malabsorption (BAM) in patients with chronic diarrhoea. Previous studies suggest that 30–60% of patients with previously unexplained chronic diarrhoea have impaired bile salt absorption<sup>(1,2)</sup>. The aim of this study was to evaluate the prevalence of Bile salt malabsorption among patients with chronic diarrhoea,

referred for 75SeHCAT scanning, and to evaluate the outcome of treatment with bile salt sequestrants in these patients.

**Methods** This was a retrospective audit of patients tested in Nottingham University Hospital in 2011. The patient was given an oral dose of 370 kBq Selenium-75-Tauroselcholic acid, a radiolabelled bile acid analogue. The patient was scanned 7 days later to assess %age of radioactive dose retained. Retention of < 15% was considered to be abnormal. This was further defined as mild (10–15%), moderate (5–10%) and severe (< 5%).

**Results** N = 130 patients, median age 49 yrs, F:M = 1.8:1. The clinical indication for scanning was chronic diarrhoea in all cases (mean 6 bowel actions per day, range 1 to 18). 65 patients (50%) had impaired salt retention. These included 11 with type I disease (Ileal resection or disease), 30 with type 2 disease (idiopathic) and 24 with type 3 disease (miscellaneous disorders eg diabetes or cholecystectomy). Interestingly only 47% of patients with previous terminal ileal resections had a positive 75SeHCAT scan. 47% of those patients with no predisposing factors in their history also had positive scans. 84% of cases with positive test responded to treatment with bile acid sequestrants. The response appeared to be independent from severity of BAM (p = 0.27) or severity of diarrhoea (p = 0.28). In one third of cases the treatment was discontinued even though clinically effective, most commonly due to poor patient tolerance to its unpleasant taste.

**Conclusion** The prevalence of BAM is high in patients suffering from chronic diarrhoea, both where a feasible organic precipitant is present (eg previous ileal resection), and where a functional disorder such as IBS was thought to be the likely diagnosis. BAM carries no specific symptoms or markers that can help the physician identify the condition. Bile acid sequestrants are effective, but often not well tolerated. SeHCAT scanning gives objective results and can potentially increase compliance to treatment.

**Disclosure of Interest** None Declared.

**REFERENCES**

1. S Pattini, JRF Walters. Recent advances in understanding of bile acid malabsorption. British Medical Bulletin 2009; 92:79–93.
2. Marta K. Borghede, Jacob M Schlutter, Jorgen S Agnholt, Lisbet A Christensen, Lars C Gromsen, Jens F Dahlerup. Bile acid malabsorption investigated by selenium-75-homocholeic acid taurin scans: Cases and treatment responses to cholestyramin in 298 patients with chronic water diarrhoea. Eur J Intern Med. 2011 Dec; 22(6):e137–40.

**PTU-193 A NOVEL, RATIONAL APPROACH TO TREATING PRIMARY BILE ACID DIARRHOEA: A PROOF OF CONCEPT STUDY OF THE FXR AGONIST OBETICHOIC ACID**

doi:10.1136/gutjnl-2013-304907.283

<sup>1</sup>I Johnston, <sup>2</sup>J D Nolan, <sup>3</sup>T Dew, <sup>4</sup>D Shapiro, <sup>5</sup>J R Walters. <sup>1</sup>Gastroenterology, Imperial College London; <sup>2</sup>Gastroenterology, Imperial College; <sup>3</sup>Chemical Pathology, Kings College Hospital NHS Foundation Trust, London, UK; <sup>4</sup>Intercept Pharmaceuticals, San Diego, United States; <sup>5</sup>Gastroenterology, Imperial College NHS Trust, London, UK

**Introduction** Primary (idiopathic) bile acid diarrhoea (PBAD) is a common chronic diarrhoeal condition, affecting ~1% of the population, and a large proportion of patients otherwise diagnosed with IBS-D. We showed that the ileal hormone Fibroblast Growth Factor 19 (FGF19), which decreases hepatic bile acid (BA) synthesis, is reduced in this condition, resulting in excess BA production and faecal BA loss. FGF19 is secreted in response to the natural farnesoid X receptor (FXR) agonist chenodeoxycholic acid (CDCA). Obeticholic acid (OCA), 6-ethyl CDCA, is a semi-synthetic derivative with ~100x greater FXR agonist potency. We aim to determine the FGF19, BA and clinical response to OCA in PBAD patients.

**Methods** After a 2-week run in period, 10 patients (7F:3M, median age 47, range 24–74) with PBAD (SeHCAT 7d retention < 10%, median 4.8%), received oral OCA 25mg daily, for 2 weeks. Bile acid