OC-059 PREVALENCE OF BILE ACID MALABSORPTION AS A CAUSE OF DIARRHOEA IN CONSECUTIVE NEW PATIENT REFERRALS TO A GASTROENTEROLOGY CLINIC

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Introduction Background Diarrhoea is a common presenting complaint in the Gastroenterology outpatient department. The potential causes are numerous, but include irritable bowel syndrome (IBS), inflammatory bowel disease (IBD), coeliac disease, and colorectal cancer. Interest in bile acid malabsorption (BAM) as a cause of diarrhoea has increased recently. However, guidelines from the British Society of Gastroenterology do not recommend routine exclusion of this condition using 23-seleno-25-homo-tauro-cholic acid (SeHCAT) scanning.

Methods Review of consecutive unselected new patient referrals to a single Gastroenterologists' outpatient clinic during a 2-year period, from January 2010 to December 2011. All clinic letters were reviewed retrospectively, and symptoms reported by the patient at the initial consultation were recorded. Radiology, endoscopy, chemical pathology, and histopathology databases were then cross-examined in order to ascertain the final diagnosis following full investigation, to the level deemed appropriate by the consulting physician. We defined BAM using a SeHCAT retention value of < 15% at 7 days.

Results Of 397 consecutive unselected new patient referrals to a single Gastroenterologist between January 2010 and December 2011, 102 (25.7%) reported diarrhoea. After investigation the final diagnoses are listed in Table 1. The second commonest cause of diarrhoea, after IBS, was BAM. Eight (53.3%) of 15 patients with BAM reported lower abdominal pain or discomfort. In 10 (66.7%) patients there was no obvious cause of BAM, and these were classified as idiopathic, or type II, BAM.

Abstract OC-059 Table 1

	Number (n = 102)	Percentage
IBS	27	26.5
BAM	15	14.7
IBD	12	11.8
Functional diarrhoea	7	6.9
Coeliac	5	4.9
PPI-related	5	4.9
Collagenous colitis	4	3.9
Pancreatic insufficiency	2	2.0
Colorectal cancer	1	1.0

Conclusion BAM was the commonest underlying cause of diarrhoea after IBS. Idiopathic BAM was commoner than coeliac disease. More than 50% of patients with BAM reported lower abdominal pain or discomfort, which may lead to misdiagnosis as IBS unless further investigations are performed. BAM should be considered as a likely diagnosis in all patients with diarrhoea, and SeHCAT scanning should be moved up the hierarchy of diagnostic tests in such patients.

Disclosure of Interest None Declared

OC-060 DOES IGA TISSUE TRANSGLUTAMINASE ANTIBODY LEVELS CORRELATE WITH HISTOLOGICAL FINDINGS OF COELIAC DISEASE (CD)?

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Introduction The current gold standard diagnostic test for CD is oesophogastroduodenoscopy (OGD) and duodenal biopsies, aiming to demonstrate the presence of villous atrophy. Given the low sensitivity of endoscopic markers and the patchy distribution of CD within the small bowel, a duodenal bulb biopsy is currently recommended. However, recent studies have raised questions about the need for biopsies in CD, particularly within the paedatric literature, with high anti-tissue transglutaminase antibody (TTG) levels believed to be sufficient. The hypothesis being that high TTG levels correlate closely with definitive CD histology (Marsh 3a-c) giving a high positive predicative value (PPV). This study evaluates TTG levels and histology (inclusive of a bulb biopsy) in adult patients suspected of having CD, with the aim of defining a cut off value for TTG when biopsy may be unnecessary.

Methods Recruitment occurred between Nov 2008 and July 2012, 523 adult patients (>16 years). All patients had a minimum of 5 duodenal biopsies taken whilst on a gluten containing diet. Furthermore, all patients were tested for IgA TTG, Endomysial Antibody (EMA) and total IgA immunoglobulin at the time of their endoscopy. This study retrospectively reviews the correlation between TTG levels (Aesku Diagnostics, Wendelsheim, Germany) and histological outcomes in these patients, with CD being defined as villous atrophy (Marsh 3a-3c) and a clinical and serological response to a gluten free diet.

Results Of the 523 adult patients (median age 51 years, range 16–91) recruited, 212 (41%) had positive TTG serology (>15 U/ml). EMA positivity was identified in 31% of the cohort (163/523) with CD diagnosed in 32% (169/523). The sensitivity, specificity, PPV and NPV for TTG was 93.3%, 83.3%, 71.7%, 96.4% respectively and for EMA 93.8%, 98.9%, 97.4% 97.2%. Table 1 shows the PPV for diagnosing CD at differing TTG levels. No cut off level was associated with a PPV of 100%, with the highest PPV value of 97.1% seen when the TTG level was set at 300U/ml (20 × upper normal limit).

Abstract OC-060 Table 1 PPV for differing cut off levels for TTG

		Number of Patients		
TTG cut off U/ml	x ULN	Coeliac disease	Not Coeliac Disease	PPV (%)
> 15	1	152	60	71.7
> 30	2	146	34	81.1
> 75	5	132	12	91.7
> 105	7	128	9	93.4
> 150	10	117	7	94.4
> 225	15	105	5	95.5
> 300	20	99	3	97.1

TTG; anti-tissue transglutaminase antibody; UNL; Upper Normal Limit; PPV; Positive Predicitve Value

Conclusion Contrary to ESPHGAN guidelines our findings would not support a biopsy avoidance strategy in those with high TTG levels, with patient potentially being wrongly diagnosed. We advocate that duodenal biopsies including a bulb biopsy remain the gold standard diagnostic test in those with suspected CD.

Disclosure of Interest None Declared

OC-061 LONG-TERM SURVIVAL OF PATIENTS WITH SYSTEMIC SCLEROSIS ON HOME PARENTERAL NUTRITION: 27-YEARS EXPERIENCE

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Introduction Patients with systemic sclerosis (SSc) may develop significant gastrointestinal involvement (GI) with associated nutritional impairment. When severe, this can progress to intestinal failure (IF)

requiring home parenteral nutrition (HPN). Few outcome data are reported on these patients [1,2,3].

Methods Records were reviewed of all patients with SSc, who had been referred to a national IF centre and who required HPN between 1985 and 2012. Disease characteristics were evaluated and survival/outcome data compared to all patients requiring HPN in the IF centre.

Results 25 patients (5 male, median age: 55 (range 24–76)) with SSc received HPN. Median time from SSc diagnosis to HPN was 58 months (range 0–378). 24/25 patients had small intestinal involvement. 1 patient had severe colonic and pharyngeal dysmotility but could not tolerate enteral feeding. 17 patients had bacterial overgrowth. 7 reported pseudo-obstruction episodes and 5 had intestinal resections.

Prior to HPN, 7 patients had failed naso-enteric feeding. 10 had a gastrostomy or jejunostomy inserted; 7 of these patients received enteral feeding for < 1 yr. The remaining patients were commenced directly on HPN without enteral tube feeding because of the severity of dysmotility/associated co-morbidity. Only 2 patients were weaned off HPN (after 8 and 29 months) following successful medical optimisation. Survival on HPN is shown in table 1. No patients died from HPN-related complications. 17/18 died from underlying SSc disease. 1/18 died from malignancy. 7 patients survive, 6 remain on HPN (median duration: 50 months, range 27–173).

8 patients were trained to manage their central venous catheters and self-administer HPN. 17 patients relied on others to administer their HPN. Reported catheter complications in SSc patients (37,600 catheter days) included occlusion (26), sepsis (7), fracture (3) and site calcification (2). Catheter sepsis rate equated to 0.19 episodes per 1000 days (vs. 0.39 per 1000 days for all HPN patients at this centre). No patient with SSc developed IF-associated liver disease.

Abstract OC-061 Table 1 Survival on HPN

	1 year	5 years	10 years	20 years
SSc HPN patients	75%	30%	11%	6%
All HPN patients	89%	67%	58%	27%

Conclusion This is the largest reported series of patients with SSc requiring HPN. Our data show that HPN offers a safe means of nutritional support for patients with severe SSc-related GI involvement, but that SSc-related mortality remains high. Notably, the SSc group had a lower catheter-related sepsis rate than all patients requiring HPN. Additionally, the majority relied on others for catheter care.

Disclosure of Interest None Declared

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OC-062 LOW INCIDENCE OF ASPIRATION EVENTS DURING HOME NASOGASTRIC FEEDING: A SAFE STRATEGY FOR LONG TERM FEEDING?

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Introduction Nasogastric (NG) pump feeding is associated with risks of aspiration and subsequent pneumonia with previous studies in adult inpatients suggesting 2.4 aspiration episodes per 1000 tube-feeding days. However, there is little published data on outcomes of patients receiving home NG feeding. We analysed our long term home NG feeding cohort for evidence of aspiration related hospital admission.

Methods This was a retrospective service evaluation of the home enteral tube feeding cohort at Portsmouth Hospitals NHS Trust. Data was obtained from hospital electronic databases, patient clinical notes and PAS patient management software. Data was analysed in SPSS 20.

Results A total of 117 patients who had received home NG feeding over previous 5 years were evaluated. 30 patients (26%) were excluded due to incomplete datasets. 87 patients were recruited (Male [48%], Female [52%], age [mean 55.6; 95% confidence interval 51.8–59.2]) with a total of 12957 tube-feeding days (mean 150; 95% confidence interval 110–191 days). Indications include upper aerodigestive tract cancer, 32; malnutrition, 25; neurodegenerative disorders, 6; connective tissue disorders, 2; stroke, 1; lymphoma, 1; metabolic stabilisation of short bowel and or high output stoma, 16. Eight hospital admissions in separate patients were recorded; however, only 1 episode of pneumonia was recorded (0.08 aspiration episodes per 1000 tube-feeding days). There were no hospital admissions relating to misplaced/displaced NG tubes.

Conclusion Home NG pump feeding represents a safe long-term alternative to gastrostomy feeding when supported by a robust specialist enteral tube feeding support service (ETFSS), in those deemed unsuitable for gastrostomy placement. A 30-fold lower incidence of aspiration episodes compared with published inpatient literature (0.08 vs. 2.4 episodes/1000 tube feeding days) reflects expertise of clinical nutrition nurse specialists within the ETFSS, with appropriate patient selection and outreach management. A daytime walk in service prevents unplanned hospital admissions through tube displacement.

Disclosure of Interest None Declared

OC-063 PAIN AND ANXIETY EXPERIENCED BY PATIENTS FOLLOWING PEG PLACEMENT

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Introduction Abdominal pain following percutaneous endoscopic gastrostomy (PEG) placement is a recognised complication considered to be secondary to a chemical peritonitis. However, the prevalence and degree of severity of pain is poorly characterised. Abdominal pain following liver biopsy is strongly linked to preprocedural anxiety levels[1]. We assessed abdominal pain and anxiety associated with PEG placement.

Methods A prospective questionnaire assessed patient anxiety and abdominal pain 1 hour (h) pre PEG placement, 1h post and 24h post using a 10-point Likert scale. The questionnaire was completed by the patient where possible or clinician if not. Abdominal pain was assessed by examination at 1h post procedure. 24h post procedure complications and analgesia requirements were recorded. Patient's Mini Mental Score (MMSE, 0–30) and Barthel index (0–20) were completed.

Results 70 consecutive patients (M:F 45:25) median age 61.5 (19–94) were assessed. The commonest indications were head and neck malignancies (44%) and stroke (11%). PEG placement was on first attempt in 68 cases, with no clinical complications.

Mean (StD), MMSE, Barthel, anxiety and pain scores.

24 self-reporting patients had a pain score of 1–3 at 1h post placement and 20 at 24 h. 3 patients reported a pain score of 7–10 at 1 h post placement and 7 at 24 h. 21/49 self-reporting patients and 0/21 non self-reporting had PEG site and/or general abdominal tenderness on clinical examination at 1h.

Pain post PEG placement was noted in only 1 clinician-assessed patient. This was at 24 h. 50.7% of patients took analgesia at 24 hours post procedure (all self-reporting). Regression showed no relationship between pre placement anxiety and post placement pain.