

Weight SDS was 0.14 (−0.20 to 0.48). Seventeen patients (39.5%) were greater than 1 SD above the median. Seven patients (15.9%) were between −1 and −2 SD. Height SDS at diagnosis was 0.5315 (0.19 to 0.87). Thirty percent were overweight (BMI >1 SD above the median) at diagnosis.

Positive family history (3rd degree relative or closer) of IBD was seen in 26.5%.

Abstract G355 Table 1 Comparison of data from Ashton (2015) with Sawczenko (2003)¹

(Percentage with symptom at presentation)

	Sawczenko (UK)	Ashton (Wessex, Southern England)
No. patients	172	49
Rectal Bleeding	84%	91.8%
Diarrhoea	74%	91.8%
Abdominal Pain	62%	87.8%
Triad of Rectal bleeding, Diarrhoea and Abdominal pain	Unknown	75.5%
Joint disease	6.4%	8.2%
Height SDS	−0.32 (Mean)	0.532 (Median)
Weight SDS	−0.12 (Mean)	0.14 (Median)

Conclusion Growth delay and raised inflammatory markers are seen in a minority of cases of UC at presentation. The majority of patients present with the classical triad of blood in stools, diarrhoea and abdominal pain however this is not invariable and absence does not preclude a diagnosis of UC.

REFERENCE

- 1 Sawczenko A. Presenting features of inflammatory bowel disease in Great Britain and Ireland. *Arch Dis Child*. 2003;88(11):995–1000

G356 JUVENILE IDIOPATHIC ARTHRITIS AND OTHER AUTOIMMUNE DISEASES IN A NATIONWIDE PAEDIATRIC INFLAMMATORY BOWEL DISEASE COHORT

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Aims Autoimmune diseases (AIDs) affect up to 10% of individuals living in Europe, so are a significant cause of chronic morbidity. High rates of immune-mediated comorbidity and familial clustering suggest that genetic predisposition underlies AI disease susceptibility, yet few clinical studies have defined the prevalence rates of co-morbid AIDs in specific paediatric populations. This study aims to document the occurrence of Juvenile Idiopathic Arthritis (JIA) and other AIDs in a Scotland-wide cohort of paediatric inflammatory bowel disease (PIBD; diagnosed <17 years of age) patients.

Methods The Paediatric-onset IBD Cohort and Treatment Study (PICTS) is a nationwide Scottish study of incident and prevalent PIBD patients, collecting a wide range of data, including rigorous phenotyping, with continuous long-term follow-up. The PICTS database was interrogated to identify patients enrolled up to 30/06/12 (follow-up to 30/06/14) with a diagnosis of at least one associated AID by last follow-up. Cases believed to be related to use of anti-TNF α treatment were excluded.

Results Of 809 patients in the PICTS cohort, 43 had one or more associated AID, an overall co-morbid immune disease rate of 5.3%; 49% (21/43) male. There were 44 AIDs in 43 patients; one patient had dual AIDs (psoriasis [PSOR] and spondyloarthritis [SPA]) co-existing with IBD. Otherwise, there were 7 cases of JIA, 3 cases of SPA and 9 cases of PSOR. Additionally there were 4 cases of coeliac disease, 2 of thyroiditis and 2 cases of type 1 diabetes. No cases of Systemic Lupus Erythematosus (SLE) were identified. There were 15 cases of autoimmune liver disease (Primary Sclerosing Cholangitis [PSC], Auto-Immune Hepatitis [AIH] and Autoimmune Sclerosing Cholangitis [ASC]) in this cohort, accounting for 35% of all PIBD-associated AID.

Conclusion Over 5% of PIBD patients in this large cohort study have associated AIDs. Autoimmune liver disease is the commonest AID in this cohort of PIBD patients, followed by PSOR accounting for 23%; JIA accounted for 16% of PIBD-associated AID.

G357 CHRONIC RECURRENT MULTIFOCAL OSTEOMYELITIS (CRMO): THE VALUE OF WHOLE BODY MRI DEMONSTRATED BY A SERIES OF 13 ADULT AND 34 PAEDIATRIC PATIENTS

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Aim To assess the role of whole-body MRI (WB MRI) in the diagnosis and management of patients with Chronic Recurrent Multifocal Osteomyelitis (CRMO). CRMO is a benign and non-infective autoinflammatory bone disorder characterised by multiple and recurrent inflammatory bone lesions. No universal diagnostic criteria exist.

Methods Retrospective review of CRMO cases diagnosed at this hospital between 2008 to 2014. Cases were identified from patient records, and clinical information was collated from radiology and histopathology records and individual case notes.

Results Forty seven CRMO patients were identified who had had WB MRI, of these 34 were paediatric patients up to the age of 18 years. The number of WB MRI scans per case ranged from 1 to 5 [mean 1.5]. WB MRI identified multifocal lesions in 30 patients. The clavicle, tibia and femur were most frequently involved. All cases were managed with non-steroidal anti-inflammatory medication or bisphosphonates. No children required steroid or anti-TNF treatment or surgical resection.

Conclusions In the absence of specific diagnostic criteria, WB MRI in combination with clinical assessment can aid in the diagnosis of CRMO. WB MRI has almost entirely replaced bone biopsy in the diagnosis of CRMO at our institution.

G358 A SYSTEMATIC REVIEW TO IDENTIFY THE DEFINITIONS OF RECOVERY FOR PAEDIATRIC PATIENTS WITH CHRONIC FATIGUE SYNDROME (CFS) OR MYALGIC ENCEPHALOMYELITIS (ME) USED IN STUDIES SINCE 1994

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Aims To describe how recovery from paediatric CFS/ME is defined, how many children recover and how long it takes.

Methods We conducted detailed literature searches of MEDLINE, EMBASE, PsycInfo and the Cochrane library, searched trial registration sites, contacted authors if results have not been published and hand searched reference lists. Three categories of search terms were used; paediatric, CFS/ME and recovery.

Inclusion criteria Randomised controlled trials or observational studies of participants <19 years old with a diagnosis of CFS/ME, related to a Western Health Care system, some measure of recovery (partial or full) reported and the time taken to reach it.

Results 21 papers were identified. The study populations ranged from 1 to 64 participants, their duration of illness ranged from 3 months to 7 years between studies and also showed great variety within each study. Some studies used a single measurement outcome for recovery, others measured several and some integrated multiple outcomes to formulate one value for recovery. The recovery rate ranged from 25–100% in those accessing treatment and 4.5–100% in those without specialist care. School attendance was the most common measurement outcome (n = 11), of which 4 of these combined this with at least one other measure. 7 studies measured physical ability as an outcome, 8 used fatigue and 9 measured a global improvement that was either self-rated or qualitatively assessed by an investigator. 2 studies described recovery as no longer fulfilling the diagnostic criteria.

Conclusion Recovery rates are relatively high in children accessing specialist treatment however, the discrepancies between the measurement outcomes, makes interpretation of recovery rates difficult.

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THE DIAGNOSIS, MANAGEMENT AND OUTCOMES OF PAEDIATRIC EOSINOPHILIC OESOPHAGITIS: A FIVE-YEAR RETROSPECTIVE ANALYSIS OF THE WEST OF SCOTLAND POPULATION

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Background Eosinophilic oesophagitis (EO) is a recently described allergic condition characterised by oesophageal dysmotility with progression to stricture formation in severe cases. Diagnosis is histological, based on >15 per high-powered field in oesophageal biopsies. Treatment options remain limited to dietary modification (including elemental feeds), proton pump inhibitors (PPI) and topical/systemic steroids. There is sparse population data on the condition.

To report demographic data on children with EO, establish the current burden of disease and review effectiveness of treatments with clinical and histopathological outcomes.

Methods All patients diagnosed with EO between 2008–2013 in RHSC Glasgow were retrospectively identified by joint review of all oesophageal histopathology reports (n = 1060) with a Consultant Paediatric Pathologist (DP) and findings correlated with clinical symptoms, treatment and outcomes. Data was analysed using Microsoft Excel 2007 and SPSS version 22.0.

Results Within the West of Scotland 30 children (mean age 9.1, range 0.7–15.2) were diagnosed with EO between January 2008 and May 2013 with no obvious increase in annual incidence. 22 (73%) were male. The most common presenting symptoms were abdominal pain (43%), vomiting (37%) and dysphagia (33%), with food bolus obstruction in 27%. Most (77%) had concurrent atopic disease. At diagnosis the mean number of

oesophageal eosinophils per high-powered field was 61, ascertained with a mean of 5 biopsies from 3 different oesophageal regions. The mean peripheral eosinophil count at diagnosis was 1.8 (range 0.0–27.0).

PPIs were clinically effective in 19/21 (70%) patients and 14/16 showed histological improvement. All 17 patients receiving dietary therapy demonstrated clinical improvement and 14/15 showed histological improvement; 11 (40%) had topical steroids, clinically effective in 10/11 patients with 7/9 showing histological improvement. However, 4 (13%) progressed to oral steroids. There was considerable overlap between treatments. At one year follow-up 93% were clinically improved and 86% showed endoscopic improvement.

Conclusions The total numbers of patients diagnosed was surprisingly small. Whilst treatment with PPI is effective, most patients also required dietary or steroid therapy. A significant number required oral steroids. A departmental guideline is being developed on the basis of these results and further work is required to establish frequency of repeat endoscopy.

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THE EPIDEMIOLOGY AND OUTCOME OF BILIARY ATRESIA IN SCOTLAND 2002–2013

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Background Biliary atresia (BA) is a rare, poorly understood liver disease of infancy that is fatal if not treated through early biliary drainage via the Kasai procedure. BA surgery was rationalised to three UK centres in 2002 following data supporting improved outcomes in institutions performing >5 Kasai per year. We have previously shown that outcomes in Scottish children were worse than expected in the years following initial rationalisation.

Aims We aimed to expand the post-rationalisation cohort of BA cases in Scotland to examine epidemiology and outcomes.

Methods Outcomes of the previously published 2002–2009 incident cohort was first expanded. New Scottish incident cases of BA born between 2010–2013, were obtained using data from specialist nurse/team knowledge. New data collection focussed on demographics, details of Kasai and outcomes (particularly 2 year transplant-free survival [2YTFS]). Accurate regional and national population data was obtained from the General Register Office for Scotland and statistics performed in R with Poisson regression analysis for incidence trends.

Results 48 infants were initially identified, of whom 5 were excluded from outcome analysis (three with Kasai performed in Edinburgh, one with <1 yr follow-up post-Kasai and one born outside Scotland). Three infants required immediate liver transplantation; 43 infants underwent Kasai. Median age at Kasai in the full cohort was 55 days (range 19–96) and showed significant improvement from 61 days in 2002–2009 to 49 days in 2010–2013 (p < 0.0001). Of those with available data, 45% cleared their jaundice (bilirubin <20 μmol/l) six months post-Kasai; 2YTFS was 40%. BA incidence in Scotland was 0.68/10,000 live births and appeared stable (0.66/10,000 in