Aims The aim of this study was to calculate current PIBD incidence rates in Scotland and to determine if the temporal trend of significant increase has been maintained.

Methods Historical data from 2003–2008 (cohort 1) was compared to prospective, nationwide data of all incident cases diagnosed in paediatric services (under 16 years of age) from 2009–2013 (cohort 2). Age-sex adjusted incidence rates were calculated using population data from the General Registrar’s Office for Scotland. Cases were classified as Crohn’s disease (CD), ulcerative colitis (UC) or inflammatory bowel disease unclassified (IBDU) and diagnosed according to the Porto criteria. Statistical analysis was performed using Poisson regression.

Results A total of 436 patients were diagnosed with PIBD over six years in cohort 1 (265 CD, 115 UC, 56 IBDU) compared to 478 children over five years in cohort 2 (286 CD, 126 UC, 66 IBDU). Median age at diagnosis in cohort 2 (60% males) was 12.3 years, similar to cohort 1 (58% males) at 11.9 years. The adjusted incidence rate increased from 7.8/100,000/year (95% CI 7.1–8.6) in cohort 1 (2003–2008) to 10.4/100,000/year (95% CI 9.6–11.5) in cohort 2 (2009–2013) (p < 0.001). This significant increase was also seen individually for CD (4.7/100,000/year [95% CI 4.2–5.4] compared to 6.3/100,000/year [95% CI 5.6–7.0] [p < 0.0001]) and UC (2.1/100,000/year [95% CI 1.7–2.5] compared to 2.7/100,000/year [95% CI 2.3–3.3] [p = 0.009]). There was a non-significant increase in IBDU from 1.0/100,000/year (95% CI 0.7, 1.3) in cohort 1 to 1.4/100,000/year (95% CI 1.1, 1.8) in cohort 2 (p = 0.07).

Conclusion There continues to be an ongoing rise in incident PIBD (and both CD and UC) in 2009–13 in this national, population-based study compared to recent historical data, with a further significant rise of 33%. The reasons behind this continued increase remain unclear and further research is needed to elucidate potential factors in aetiopathogenesis.
Abstract G355 Table 1  Comparison of data from Ashton (2015) with Sawczenko (2003)

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

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 invariably and absence does not preclude a diagnosis of UC.

REFERENCE

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

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-TNFα 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 spondyloarthropathy [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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10.1136/archdischild-2015-308599.313

Aims 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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10.1136/archdischild-2015-308599.314

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