throughout the colon, and their histology revealed microscopic inflammation. Other patients with histologically active disease had normal CLDN8 expression.

**Conclusion** CLDN8 is significantly under-expressed in the UC colon. Outlier analysis has also identified a group of patients in whom CLDN8 is grossly under-expressed. Low expression of CLDN8 in UC could be secondary to inflammation, although the evidence presented here is against this. Reduced levels of CLDN8 could lead to a weak and permeable mucosa predisposing to UC by reducing barrier resistance and allowing penetration by microbes.

**Competing interests** None declared.

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**Adolescent and young people**

**PTU-131** RESPONSE TO ENTERAL NUTRITION PREDICTS INCREASED LENGTH OF REMISSION IN CHILDREN WITH CROHN’S DISEASE

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**Introduction** Exclusive enteral nutrition (EEN) is the primary therapy for children with intestinal Crohn’s disease (CD) in the UK. We hypothesised that entering remission with EEN predicted a longer duration of remission.

**Methods** Retrospective data were obtained on children with CD from 2003 to 2006 at a tertiary paediatric gastroenterology centre. Response was determined by Physicians Global Assessment. Outcome measures investigated were: relapse rates, time to relapse, corticosteroid (CS) use and treatment escalation. Relapse was defined as worsening symptoms and/or increase in CRP with a change in medication. p Values of <0.05 were considered significant.

**Results** 75 children with CD were diagnosed between 2003 and 2006, in whom 62 had 5 year follow-up data available. 56 patients (90.3%) received EEN upon diagnosis. The others received 5-ASA [4] or antibiotics [2], and were excluded from the analysis. No patients received corticosteroids as initial treatment. The median age [range] at diagnosis was 12.87 [4.84–15.86] years. 62.5% [35] of patients had ileo-colonic disease. 94.6% [53/56] of patients tolerated EEN. 57.1% [32] of patients went into clinical remission with EEN. Corticosteroids were prescribed to those who failed to enter remission with EEN. Multivariate analysis showed no correlation between disease location (p=0.70), ethnicity (p=0.45), age (p=0.25) or CRP (p=0.75) and response to EEN. All of the patients with colonic disease relapsed over 5 years (n=7), compared to 79% [11/14] of patients with ileal disease and 77% [27/35] of patients with ileo-colonic disease (p=0.57). The patients who responded to EEN remained in remission significantly longer than the non-responders. Median time to relapse [range] over the 5 years was 17.4 [4.23–49.52] months in responders vs 9.72 [2.87–47.6] months in non-responders; p=0.041 (Abstract FTU-151 figure 1). 50% [16/32] of patients who responded to EEN had no corticosteroid use over the 5 years. There was no significant difference in those starting azathioprine between responders and non-responders (75% [23/32] vs 57.5% [21/36]; p=0.20), or in rates of infliximab (22% [7/32] vs 37.5% [9/25]; p=0.24) or surgery (28% [9/32] vs 37.5% [9/25]; p=0.57).

**Conclusion** This is the first study proving that achievement of clinical remission with EEN predicts an improved outcome for paediatric patients with Crohn’s disease over the next 5 years. It is possible that this is due to improved mucosal healing in children responding to EEN.

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**PTU-132** INCREASED DUODENAL INTRA EPITHELIAL LYMPHOCYTES (IELS) ARE ASSOCIATED WITH RECURRENT ABDOMINAL PAIN AND PARASITE INFECTION BUT NOT HELICOBACTER PYLORI IN A PAEDIATRIC CHILEAN COHORT

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**Introduction** Functional Recurrent Abdominal Pain (RAP) is a paediatric functional gastrointestinal disorder with poorly investigated pathophysiology. Proposed aetiology varies and the diagnosis is characterised by Rome III criteria. Some studies consider Helicobacter pylori to be a cause of RAP, while others disagree. The aim of this study was to investigate upper gastrointestinal pathology in a cohort of 123 children in Chile with respect to RAP, H pylori infection and other concurrent infection.

**Methods** This blinded retrospective and IRB-approved study analysed biopsies taken from the gastric antrum and body and the duodenum in 125 Chilean children referred to endoscopy (with informed parental consent). Histopathology was evaluated against a clinical database which included symptoms, symptom duration and endoscopy findings. Rome III criteria were used to assign RAP to the relevant cases. All patients had stool microbiology and parasitology. H pylori infection was assessed by serology and histology. In the duodenum, routine histopathology and also eosinophil counts (in SHPF ×40 magnification), were performed by microscopy. IELs/100 enterocytes were counted. Independently those patients with IELs >25 had serology performed for coeliac disease.

**Results** Overall 105 patients were diagnosed with RAP and 12 patients were able to act as controls, having no symptoms of RAP or concurrent infection. The Rome III diagnosis of RAP was significantly associated with higher IEL counts (>20 in 74 patients) compared to controls (p=0.04). Furthermore, a higher IEL count was also positively associated with parasitic infection (nine with parasites) (p=0.02). Of 16 patients with lymphocytic duodenitis, (>25 IELs per 100 enterocytes) only three were infected by H pylori. One had coeliac disease with positive serology. Antrect nodularity was observed in association with lymphoid follicles (≥0.01) and H pylori infection (<0.01). 28% in this cohort were positive for H pylori but infection was not...
significantly associated with RAP (p=0.55) or parasite infection, as concurrent infection was present in only 2 patients (p=0.24).

**Conclusion** From this study, low grade inflammation, manifest by increased IELs, may be associated with RAP and also parasitic infection. *H pylori* is not associated with parasite infection. However, as eosinophilia was not significantly associated with the condition further investigation is required to elucidate the potential involvement of innate immunity, including mast cells. Furthermore, there is no association between *H pylori* infection and RAP. Funded by EU CONTENT Project (INCO-CT-2006-032136), CONICYT/AMICYT/CONICET and FONDECYT (#1100654 (Chile)).

**Competing interests** None declared.

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**PTU-134**

**READY TO GO AND LET GO: PERSPECTIVES ON TRANSITION AND TRANSFER FROM PEDIATRIC TO ADULT HEALTH CARE: A PAIRED PILOT SURVEY OF ADOLESCENT IBD PATIENTS AND THEIR PARENTS**

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**Introduction** National surveys report that transition care in inflammatory Bowel Disease is still not well developed. Although the general principles guiding transition of adolescents with chronic illnesses from paediatric to adult health care have been established, there are no studies to assess the transfer needs and concerns of adolescents with IBD and their carers. We aimed to gauge the perspectives of adolescents with IBD and their parents to determine their issues, concerns and expectations.

**Methods** A cross sectional survey of IBD patients starting transition process in a dedicated transition clinic and their parents was undertaken using a semi-structured questionnaire designed for self-completion. Along with demographic and clinical information, respondents were asked to rate on a scale of 1–5 (using Likert scale anchored by 1-least important and 5-very important and essential) their responses on their perceived importance on the aspects of preparation, self management skills, concerns regarding transfer and value of support services.

**Results** 20 patients (12 Crohn’s and 8 Ulcerative Colitis) and their parents completed the survey independently. There was concordance in the responses of patients and their parents in rating highly the need for information, education and co-ordination of transfer process (Abstract PTU-133 table 1). The knowledge, empathy and accessibility were identified as key attributes for the transferring adult team (Abstract PTU-133 table 2). The highest rated concern for both adolescents and their parents was the perceived differences in performing tests such as endoscopy (mean score of 4.35±0.17 and 4.65±0.23 respectively). The adolescents favoured to attend appointments without parents before transfer (mean score 3.65±1.18) as opposed to their parents (mean score 1.9±1.16). In addition parents were concerned whether they will become less involved in care following transfer (mean score 4.15). The adolescents’ favoured younger age of transition and transfer when compared to their parents. While dedicated adolescent services were described as beneficial by patients and their parents, only 50% of patients preferred to have joint appointments.

**Conclusion** This first pilot study demonstrates significant concerns about transition process needing addressing among adolescent IBD patients and their parents. Patients and parents differ in their rating of independence and self advocacy needed at the time of transfer. Tailoring transition to individual patient and parent needs without dedicated transition care teams may be challenging.

**Competing interests** None declared.

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**PTU-135**

**INCIDENCE OF HP INFECTION IN CHILDREN AND THE ASSESSMENT OF HISTOLOGICAL STAINING PRACTICE**

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**Introduction** The exact incidence of *Helicobacter pylori* (HP) in childhood is unknown. There is a causal link between HP and development of peptic ulcers, gastric adenocarcinoma, and lymphoma. However there is little evidence and guidance on the clinical management of HP in children. The North American Society