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.

Adolescent and young people

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

doi:10.1136/gutjnl-2012-302514c.131

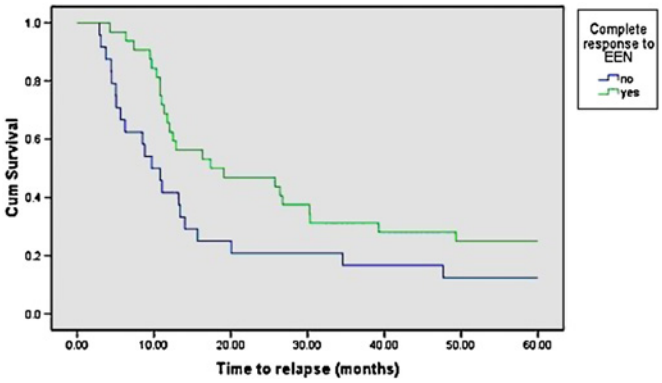
A Rao,* N Kamperidis, Y Koodun, S Naik, N M Croft, I R Sanderson. *Centre for Digestive Diseases, Barts and the London School of Medicine and Dentistry, Queen Mary University of London, London, UK*

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=0.43), age (p=0.25) or CRP (p=0.73) 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=0.37). 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 [4.23–49.32] months in responders vs 9.72 [2.87–47.6] months in non-responders; p=0.041 (Abstract PTU-131 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 87.5% [21/24]; p=0.20), or in rates of infliximab (22% [7/32] vs 37.5% [9/24], p=0.24) or surgery (28% [9/32] vs 37.5% [9/24], 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.



Abstract PTU-131 Figure 1 Time to relapse in responders and non-responders to EEN (p=0.041) [log ran test—Kaplan–Meier survival analysis].

A.Rao and N.Kamperidis contributed equally and should be considered as joint first authors.

Competing interests None declared.

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

doi:10.1136/gutjnl-2012-302514c.132

[1]M M Walker,* [1]G S Rakhra, [2]A Villagran, [2]P R Harri, [3]J E Crabtree. *[1]Histopathology, Imperial College, London, UK; [2]Division of Pediatrics, School of Medicine Pontificia Universidad Catolica de Chile, Santiago, Chile; [3]Leeds Institute Molecular Medicine, St. James's University Hospital, Leeds, UK*

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 123 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 5HPF ×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 duodenosis, (>25 IELs per 100 enterocytes) only three were infected by *H pylori*. One had coeliac disease with positive serology. Antral nodularity was observed in association with lymphoid follicles (p≤0.01) and *H pylori* infection (p<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/BM (RUE #29) and Fondecyt #1100654 (Chile).

Competing interests None declared.

PTU-133 READY TO GO AND LET GO: PERSPECTIVES ON TRANSITION AND TRANSFER FROM PAEDIATRIC TO ADULT HEALTH CARE: A PAIRED PILOT SURVEY OF ADOLESCENT IBD PATIENTS AND THEIR PARENTS

doi:10.1136/gutjnl-2012-302514c.133

N Rao,* D Ashok, A Azaz, S Sebastian. *Hull & East Yorkshire NHS Trust, Hull, UK*

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 4.55±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.

PTU-134 WHAT DO YOUNG PEOPLE AND PARENTS WANT FROM AN INFLAMMATORY BOWEL DISEASE (IBD) SERVICE?

doi:10.1136/gutjnl-2012-302514c.134

[1]R Little,* [2]C Imrie, [3]A Derby, [3]P Gillespie, [1]G R Caddy, [1]T C Tham. *[1]Gastroenterology, Ulster Hospital, Dundonald, Belfast, Belfast, UK; [2]Altnagelvin Hospital, Derry/Londonderry, UK; [3]Northern Ireland branch, Crohns and Colitis UK, Belfast, UK*

Introduction At present, there are guidelines from the US and Europe regarding the formation of transition clinics for adolescents with IBD. This includes a UK Inflammatory Bowel Disease (IBD) Standards guidance on optimal service provision for paediatric and adolescent care. However most of these guidelines come from intuitive reasoning and opinion, as there is a lack of data on what constitutes an ideal service for young patients with IBD. The aim of this study was to develop a comprehensive knowledge and understanding of the key service requirements of young people with IBD as well as their parents.

Methods Paediatric and adolescent patients age 6–18 years, were identified from databases in two teaching hospitals and from the membership of the N Ireland branch of Crohn's and Colitis UK, which is a patient support group. Anonymous questionnaires were sent to these patients and their parents separately. The questionnaires asked about their perceived quality of care, clinic care, general comments, input from specialists, support and information, plus any suggestions.

Results 105 questionnaires were sent and 51 responded (49%); of these 21 were from patients and 30 from their parents. Over 84% were happy with the quality of care they are receiving. Reasons patients and parents were reluctant to attend clinics included: blood tests, nurse specialist or doctor not available, lack of car parking. 90% preferred to see the attending (Consultant) rather than a fellow. Nurse specialist, dietetics, specialist IBD surgeon, psychologist, skin/eye specialist input was thought to be beneficial by 95%, 81%, 71%, 59%, and 45% respectively. The following support service and information were considered important: immediate contact with healthcare personnel for disease flare, support groups for young adults, insurance and financial advice, knowledge about IBD developments and research, email service, surgical input regarding stomas.

Conclusion The majority of young patients with IBD and their parents are satisfied with the care they are receiving. Support from specialist services such as nurse specialist, dietitians, specialist IBD surgeons, psychologist, plus rapid access to services when the disease flares were thought to be important by the patients and their parents. Knowledge of what these patients and their parents want will help to design an optimal IBD service.

Competing interests R Little: None Declared, C Imrie Conflict with: Mead Johnson, Falk Pharma, Nutricia, Warner Chilcott, SHS, Norgine, Wyeth, A Derby: None declared, P Gillespie: None declared, G Caddy: None declared, T Tham Speaker bureau with: Warner Chilcott, Shire, Conflict with: Abbott, MSD.

PTU-135 INCIDENCE OF HP INFECTION IN CHILDREN AND THE ASSESSMENT OF HISTOLOGICAL STAINING PRACTICE

doi:10.1136/gutjnl-2012-302514c.135

[1]Z M Mead, [1]B Vadgama, [2]R Mead,* [1]D Fowler, [1]S Holden. *[1]Paediatric Histopathology, University Hospital Southampton NHS Trust, Southampton, UK; [2]Gastroenterology, Hampshire Hospitals NHS Trust, Basingstoke, UK*

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