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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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=0.73), ethnicity (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 [4.23–49.52] months in responders vs 9.72 [2.87–47.6] months in non-responders; p=0.041 (Abstract PTU-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 75.5% [22/29]; 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.