Methods Retrospective analysis of all North East Paediatric SBS patients who have been cared for by the HPN team during the past 11 years, using anonymised routinely collected data. Comparative statistical analyses were performed, using parametric or non-parametric tests as appropriate, to evaluate the significance of differences in predictive factors between children who achieved intestinal autonomy and those who have not yet done so.

Results 70 children who had received HPN were identified. 35 had SBS, 35 had non-SBS diagnoses. 33 had neonatal onset, 2 had childhood onset. 2 died (from illnesses not relating to SBS). Of the remaining 31 in the neonatal onset group, 15 have achieved successful IR to date. The underlying causes of SBS were similar between the two groups. Mean bowel length was significantly longer in the successful IR group (48.3 cm vs 24.5 cm, $p<0.01$), the mode number of central lines was significantly lower in the successful IR group (3 vs 6, $p<0.01$), and the number of line infections post-discharge was significantly lower in the successful IR group (>2 treated line infections post-discharge 2 vs 8, $p<0.05$).

Conclusions We confirmed that the initial length of bowel is important in determining outcome amongst children with early onset intestinal failure. We further show that the number of central lines and the number of courses of antibiotics given for line infections may be even more important in predicting outcome, which suggests that intestinal microbiota play a key role in intestinal rehabilitation.

P262 DIAGNOSIS AND MANAGEMENT OF SMALL INTESTINAL BACTERIAL OVERGROWTH (SIBO): CURRENT PRACTICE ACROSS ENGLAND

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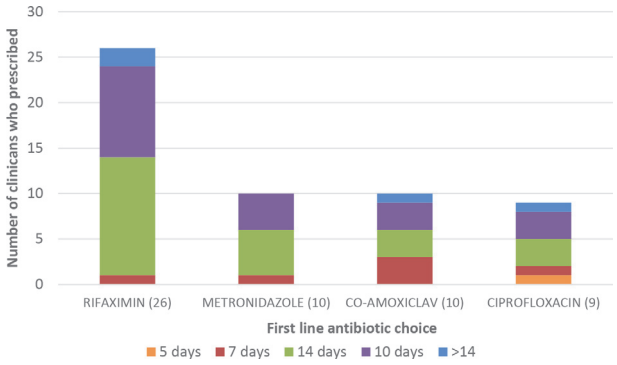
Introduction Despite causing multiple gastrointestinal symptoms, a diagnosis of small intestinal bacterial overgrowth (SIBO) can be difficult to establish due to the lack of a standardised diagnostic test. Current BSG guidelines advise empirical antibiotic treatment in high probability cases,[1] although evidence for which antibiotic to use first line and duration of treatment is lacking.[2] As a result of these factors, we suspect that current practice in the diagnosis and management of SIBO may vary considerably between gastroenterologists across the country and aimed to assess this.

Methods A brief survey was created to collect data on the diagnosis and treatment of SIBO, as well as the methodology used for hydrogen/methane breath testing (HMBT) in comparison with recent UK guidelines.[3] The survey was emailed to 607 gastroenterologists (consultants/registrars) who's email addresses were obtained through an existing database or via the nhs.net email server.

Results There were 57 (9%) respondents from 31 different hospitals. Recent UK guidelines[3] advise that best practice for HMBT should measure methane excretion in addition to hydrogen and have both lactulose and glucose substrates available for testing, but this was only done in 7/31 (22%) and 11/31 (35%) hospitals respectively. Rifaximin (26), followed by metronidazole (10), co-amoxiclav (10) and ciprofloxacin (9) were the most commonly used antibiotics for SIBO treatment,



Abstract P262 Figure 1 First line antibiotic choice and duration of therapy prescribed

with antibiotics usually given between 10 – 14 days (44/57, 77%), although length of treatment prescribed varied from 5 – 21 days (see figure 1). Most gastroenterologists (61%) would initially give antibiotic treatment for a suspected high probability case of SIBO but request a breath test first (65%) if the patient was only felt to have a moderate probability of SIBO.

Conclusion Best practice guidelines on HMBT are not followed in many hospitals in England and there is considerable variation among gastroenterologists between first-line antibiotic choice and duration of treatment. Improving standards of HMBT would increase accuracy of testing, while greater evidence for choice and duration of antibiotic therapy in SIBO would improve consistency of treatment among clinicians, resulting in cost-savings and fewer side effects to patients from unnecessarily long or repeated courses of antibiotics.

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P263 IRINOTECAN INDUCES A RAPID INCREASE IN ENTEROID PERMEABILITY

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Introduction Chemotherapy-induced diarrhoea is a common side effect for patients given irinotecan and can result in the cessation/interruption of treatment affecting clinical efficacy. The clinical approach is to treat diarrhoea symptomatically as there are currently no preventative therapies. Recent *in vivo* studies suggest that irinotecan initiates two phases of diarrhoea with the first attributed to changes in intestinal permeability through tight junction (TJ) disruption. We have now investigated whether small intestinal (SI) organoids (enteroids) can be used to model SI permeability changes induced by irinotecan to dissect the mechanisms responsible for irinotecan-induced diarrhoea. Understanding