any HPN cohort is vital, given the associated risk of HPN related complications. Moreover, with developments in surgical lengthening and potential for emerging pharmacological interventions, appropriate patient selection is key. However, there may be regional and national differences between different SBS-IF patient populations; this study therefore aimed to develop a greater contemporary understanding of the SBS-IF subset managed within a large U. K. HPN cohort.

Method We performed a retrospective observational study from a prospectively maintained database, evaluating patients with type 3 IF managed in a national U. K. centre. Patients' intestinal anatomical details were reviewed and PN requirements evaluated according to the novel ESPEN classification for type 3 IF. Each individual SBS case was evaluated to assess eligibility for GLP-2 analogue therapy according to recently published inclusion criteria

Results A total of 273 patients were included in the HPN database as of October 2017. One hundred and fifty two patients (55.7%; mean age of 56.9 years) were identified as having IF as a result of SBS (SBS-IF), with the presence of a jejunostomy (SBS-J; 41.8%) as the most frequent pathophysiological mechanism. Only 7.3% of patients with SBS-IF had colon in continuity. Crohn's disease was the most common underlying aetiology leading to SBS-IF. The mean duration of HPN was 60.8 months (range: 4–415.8). Univariate analysis for the whole HPN cohort demonstrated SBS-IF and a longer duration of HPN to be associated with higher PN energy requirements, $p \leq 0.0001$. Seventy three (48.0%) patients with SBS-IF were deemed suitable for treatment with a GLP-2 analogue, with co-morbidity being the most frequent cause of non-suitability.

Conclusion This is the largest UK HPN cohort individually reported using ESPEN pathophysiological and clinical severity classification. The vast majority of patients with SBS-IF have a jejunostomy and, as compared to other international cohorts, relatively few have colon-in-continuity. The study further demonstrates that existing co-morbidity is a principal contra-indication to therapy with GLP-2 analogue therapy in a majority of patients with SBS-IF; these data will be useful for funding bodies to consider when planning reimbursement costs for novel therapies within limited national healthcare budgets.

ADWE-09 LOW FODMAP DIET IMPROVES FUNCTIONAL-LIKE GASTROINTESTINAL SYMPTOMS BUT REDUCES BIFIDOBACTERIA IN QUIESCENT INFLAMMATORY BOWEL DISEASE

¹Selina Cox*, ²Andrew Stagg, ³Sebastián Fromentin, ^{1,3}Dusko Ehrlich, ²Neil McCarthy, ³Nathalie Galleron, ³Florence Levenez, ^{1,4}Miranda Lomer, ⁵James Lindsay, ⁴Peter Irving, ¹Kevin Whelan. ¹King's College London, London, UK; ²Queen Mary University of London, London, UK; ³Institut National de la Recherche Agronomique, Paris, France; ⁴Guy's and St Thomas' NHS Foundation Trust, London, UK; ⁵Barts Health NHS Trust, London, UK

10.1136/gutjnl-2018-BSGAbstracts.328

Introduction Many patients with quiescent inflammatory bowel disease (IBD) also experience functional-like GI symptoms. The low FODMAP diet improves GI symptoms in quiescent IBD in uncontrolled trials but there are no placebo-controlled trials to confirm this. We performed a randomised, placebo-controlled trial to assess the effects of a low FODMAP diet on GI symptoms, microbiota, inflammatory markers and circulating gut-tropic ($\alpha 4\beta 7+$) T-cells in patients with quiescent IBD.

Methods Patients with Crohn's disease (CD) or ulcerative colitis (UC) were included. Quiescent IBD was defined as: 1) Physician Global Assessment, 2) faecal calprotectin [FC] $< 250 \mu\text{g/g}$ and 3) CRP $< 10 \text{ mg/L}$. Suitable patients fulfilled the Rome III criteria for IBS, functional bloating or functional diarrhoea, and were naïve to the low FODMAP diet. Participants were randomised to low FODMAP or placebo (sham) dietary advice for 4 weeks. At baseline and end of trial, GI symptoms and stool output were measured using validated questionnaires. Faecal microbiota were characterised using metagenomic sequencing and $\alpha 4\beta 7+$ T cell populations quantified using flow cytometry. End of trial data were compared intention to treat between the diets using analysis of covariance adjusting for baseline values.

Results Fifty two patients were randomised (27 low FODMAP diet, 25 sham diet). At the end of trial, more patients reported adequate relief of GI symptoms following the low FODMAP diet (14/27, 52%) than the sham diet (4/25, 16%) ($p=0.007$). Total IBS Severity Scoring System score decreased by 67 points (SD 78) during the low FODMAP diet and 34 points (SD 50) during the sham diet ($p=0.075$). Daily stool frequency was lower following low FODMAP diet (1.7 SD 0.5) than sham diet (2.1 SD 0.5) ($p=0.012$). Bacterial gene richness was not different between the groups at end of trial ($p=0.620$). Relative abundance of *Bifidobacterium longum* (1.24×10^{-7} vs 6.95×10^{-7} , $p=0.003$) and *B. adolescentis* (1.99×10^{-7} vs 2.55×10^{-6} , $p=0.015$) was lower following low FODMAP diet compared to sham diet. Between baseline and end of trial, *Faecalibacterium prausnitzii* SL3/3 M21/2 (2.30×10^{-6} vs 1.52×10^{-6} , $p=0.029$) and *F. prausnitzii* KLE1255 (4.49×10^{-6} vs 2.68×10^{-6} , $p=0.006$) declined in the low FODMAP diet group. There was no difference in proportions of $\alpha 4\beta 7+$ T cells between groups at end of trial.

Conclusions The low FODMAP diet improved functional-like GI symptoms in patients with quiescent IBD but reduces immunoregulatory species of the intestinal microbiota, though does not impact on inflammatory markers or $\alpha 4\beta 7+$ blood T-cell numbers.

PWE-095 WHAT IS THE ROLE OF CAPSULE ENDOSCOPY IN EVALUATING PATIENTS WITH REFRACTORY COELIAC DISEASE?

Stefania Chetcuti Zammit*, David S Sanders, Reena Sidhu. Sheffield Teaching Hospitals, Sheffield, UK

10.1136/gutjnl-2018-BSGAbstracts.329

Introduction Small bowel capsule endoscopy (SBCE) is used in refractory coeliac disease (RCD) to assess the extent of disease and ensure there are no complications (lymphoma or ulcerative jejunitis). However there are no published reports on SBCE in RCD following immunosuppressive therapy.

Methods Patients with histologically confirmed refractory coeliac disease (RCD) who underwent a SBCE at baseline and after treatment were enrolled in this study. These were compared to a group of control CD patients with no underlying RCD.

Results 19 patients (median 53 years) with RCD (12 patients; 63.2% – type 1) were compared to 28 patients with control CD (median 48 years). There was no statistically significant difference in duration of disease, gender, age at SBCE and serology between the 2 groups.