duodenal bulb. In this study 14/153 (9%) of newly diagnosed coeliac disease patients and 13/91 (14%) of CD remission patients demonstrated VA in the bulb alone. We suggest that endoscopists should consider taking a duodenal bulb biopsy in patients suspected of having coeliac disease and in reassessment cases.

Competing interests None declared.

BSG transition symposium

OC-050 INPATIENT PAEDIATRIC UC CARE IN THE UK IN 2011 IS CHARACTERISED BY INCREASING RATES OF RESCUE THERAPY AND STOOL CULTURES BUT LOW USE OF PUCAI SCORES

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Introduction Paediatric UC care is variable in the UK and appropriate clinical guidelines are very recent. Acute severe UC is rare with only a few cases presenting annually to each tertiary hospital.

Methods UC patients aged <17 years admitted to 23 UK paediatric hospitals had clinical details collected as part of the UK paediatric IBD audit (September 2010–2011). Each site was asked to enter up to 20 cases admitted electively or as an emergency, including patients who were having surgery. Day cases and patients who were admitted solely for diagnostic endoscopy were excluded. Comparative data for some items was available from the previous UK audit conducted in 2008.

Results 176 patients (98 males) of median age 13 years (IQR 10–13) were included in the audit; 22 were elective surgical admissions, 47 new diagnoses and 107 needed acute medical care for known UC. Median length of stay was 6 days (IQR 3–10); there were no deaths. 73% of patients with established disease had a pancolitis and 10% had co-existent liver disease. 88 (70%) of 126 patients with active disease had standard stool cultures performed (2% were positive) and 57 (45%) had *C difficile* toxin tested (none positive). Stool sample collection rates had improved significantly compared to the 2008 audit (70% vs 52%, p=0.001). 38% of emergency admissions had a plain abdominal XR taken on admission, but only 19% had a specific disease activity index (PUCAI score) recorded. There were three cases of toxic megacolon and 3 of thromboses. Rates of heparinisation were low but higher than in the 2008 audit (11% vs 2%, p=0.002). 71% of patients treated with steroids responded to treatment. 20 patients received 2nd line (rescue) therapy, of whom eight received infliximab, 11 Cyclosporin and one both, with an overall response rate of 90%; nine went to surgery without 2nd line medical therapy. Rescue therapy usage was significantly higher than in the 2008 audit (52% vs 26%, p=0.03). Overall, 71% of non-elective UC admissions were seen by an IBD nurse.

Conclusion There were signs of improving UC care from 2008 to 2011 with significantly increased rates of stool culture sampling and use of rescue therapy, but the majority of sites did not use PUCAI scores to assess patients on emergency admission.

Competing interests None declared.

OC-051 MICROBIAL, PHENOTYPIC AND GENETIC MARKERS OF RISK: ASPECTS OF CROHN'S DISEASE THAT ARE SHARED BY UNAFFECTED SIBLINGS

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Introduction Siblings of Crohn's disease (CD) patients have elevated risk of developing disease which may manifest as raised faecal calprotectin (FC) and increased intestinal permeability. Other features of CD that reflect the at-risk state and their interactions are not well described.

Aim Identify key facets of the at-risk state and establish their relationships.

Methods Faecal samples from 22 patients with quiescent CD, 21 siblings and 25 controls were analysed for FC (ELISA) and microbiota (quantitative PCR targeting bacterial 16S ribosomal RNA genes). Genotype RR at 72 known CD risk loci was determined by Illumina Immuno BeadChip, analysed with the REGENT R package. p Values from non-parametric analyses were Bonferroni corrected to adjust for multiple testing.

Results FC was elevated (>50 μg/g) in 21 (96%) patients, 8 (38%) siblings and 2 (8%) controls. Compared with controls, patients had reduced Bacteroidetes, clostridial cluster IV, *Faecalibacterium prausnitzii*, *Ruminococci*, *Bifidobacterium adolescentis* and *Roseburia* spp. (Abstract OC-051 table 1). Similarly, in siblings vs controls there was reduced cluster IV clostridia, (specifically *F prausnitzii*) and *Roseburia* spp. (Abstract OC-051 table 1). This dysbiosis was evident in siblings with normal FC. Siblings with elevated/high genotype RR (n=4) had normal FC but reduced Bacteroidetes vs controls, (9.2 vs 10.4 $\log_{10}$/g, p=0.007).

Conclusion In addition to enhanced genotypic risk and elevated FC, siblings share aspects of CD dysbiosis, in particular lower butyrate producing bacteria. Reduced Bacteroidetes comparable to that seen

Abstract OC-051 Table 1 Concentrations of bacteria between groups

Bacteria ($\log_{10}$/g dry weight faeces (IQR))	Median concentration			p Values		
	Patient	Sibling	Control	Patient vs sibling*	Patient vs control*	Sibling vs control*
Universal	10.7 (0.73)	10.8 (0.48)	11.0 (0.54)	0.759	0.015	0.117
Bacteroidetes	8.8 (1.70)	10.2 (1.20)	10.5 (0.69)	0.009	<0.005	0.639
Clostridial cluster IV	7.8 (3.02)	9.3 (1.17)	9.7 (0.78)	0.018	<0.005	0.030
F prausnitzii	6.9 (4.32)	9.3 (1.66)	9.6 (0.80)	0.006	<0.005	0.048
Roseburia spp.	9.2 (2.50)	9.3 (2.49)	9.9 (0.77)	1.000	0.027	0.009
Ruminococci	7.1 (2.34)	8.8 (1.29)	9.6 (1.65)	<0.005	<0.005	0.084
Bifidobacteria adolescentis	5.8 (3.90)	9.0 (1.35)	9.2 (1.68)	0.042	0.027	1.000

*Bonferroni corrected p values.

in patients, was only found in siblings with increased genotypic risk, raising the possibility of genetic determination. Sibling dysbiosis occurred independently from inflammation. Dysbiosis appears to be an early event in CD pathogenesis and may be an additional marker of CD risk.

Competing interests C Hedin grant/research support from: clinical research fellow funded by core charity, K Taylor: None declared, P Louis: None declared, F Farquharson: None declared, S McCartney: None declared, N Prescott: None declared, A Stagg: None declared, J Lindsay: None declared, K Whelan: None declared.

OC-052 COMPARATIVE EVALUATION OF OUTCOMES IN ADOLESCENTS WITH IBD ON TRANSFER FROM PAEDIATRIC TO ADULT HEALTH CARE SERVICES: A CASE FOR STRUCTURED TRANSITION

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Introduction Transition and transfer of adolescent IBD patients to adult health care services is considered suboptimal in surveys. There is limited data on patients undergoing transition and transfer. We aimed to evaluate the impact of transition service on clinical and developmental outcomes of adolescent IBD patients on transfer to adult health care services.

Methods We reviewed records of IBD patients diagnosed in paediatric care who has been transferred to the adult IBD service. We extracted data on their transition and transfer arrangements, disease outcomes, surgery requirements, radiation exposure, medication compliance, alcohol and drug use and growth and development. The data was compared between those who attended transition service with those who did not pass through the transition service.

Results 51 patients were identified (29M and 22F). 38 patients had Crohn`s disease, 11 ulcerative colitis and two indeterminate. The median age at diagnosis was 14 years (range 9–16 years) and the median age at first visit to adult health care was 18 years.35 patients went through the transition system (group A) but 16 had no formalised transition arrangement before transfer (group B). Group A patients had a median of three appointments (range 2–7) in transition clinic before transfer. Significantly higher number of group B patients needed surgery within 2 years of transfer when compared to patients in group A (26% vs 17.1%, p=0.05). Similarly 75% of patients in group B needed at least one admission when compared to only 28.6% of group A patients (p=0.002). Non-attendance to clinics was a higher problem in group A patients with 93.75% having at least one non attendance while 37.1% of group B failed to attend at least one appointment. In addition, drug compliance rates were higher in the transition group when compared to group B (76% and 37.5% respectively p=0.001. Higher proportion of transitioned patients achieved their estimated maximum growth potential when completing adolescence. 31 of the 35 patients in group A proceeded to higher education/and or employment while this was achieved only by 50% of the group B patients. The mean cumulated IBD related radiation exposure was higher was in group B patients (17.04 mSv) when compared to group A (7.48 mSv) (p=0.0001). There was a trend towards higher dependence on opiates and smoking in group B patients.

Conclusion In adolescent IBD patients, transition care is associated with better disease specific and developmental outcomes. Prospective studies of different models of transition care in IBD are needed.

Competing interests None declared.

BAPEN symposium: "feeding in chronic conditions"

OC-053 AN 800 KCAL NUTRITIONALLY COMPLETE TUBE FEED PROVIDES MORE ADEQUATE NUTRITIONAL INTAKE AND IS PRACTICALLY EASIER AND QUICKER TO USE THAN CURRENTLY USED REGIMENS

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Introduction Some long term, chronically ill, tube fed patients with severe central nervous system impairment, may have lower energy requirements than predicted and need very low energy tube feeding regimens (~800 kcal total energy per day) to maintain weight.[1 2] These patients receive a variety of different but nutritionally inadequate regimens, which can be complex and time consuming, with increased risk for errors and contamination[3] This study aimed to compare the nutritional outcomes and practicality of using current tube feeding regimens, vs a specifically developed ready made 800 kcal nutritionally complete tube feed.

Methods Long term tube fed patients (n 15) with severe neurodisorders (mean age: 51 yrs (SD 14), mean BMI: 24 kg/m^2 (SD 2.5), mean time receiving ≤1000 kcal/d: 3 yrs (SD 3.5)) requiring ~800 kcal/d, received their current tube feeding regimen (either 1000 kcal nutritionally complete tube feeds or a mixture of feeding products (a tube feed, protein powder and powdered vitamin and mineral preparations)) for 1 wk, followed by 800 kcal/1000 ml per day of a ready made nutritionally complete tube feed (Nutrison 800 Complete Multi Fibre) for 4 wks. Nutritional outcomes (nutritional intakes, body weight) and practicality (ease of use, time to prepare and administer, acceptability and preference) were assessed weekly. NHS research ethics approval for this study was received in January 2011.

Results The proportion of patients meeting their energy requirements (100% vs 47%), and their RNIs for protein (100% vs 87%) and vitamins & minerals (100% vs 53%) was substantially greater with the ready made tube feed vs current regimens. Use of the ready made tube feed significantly increased the percentage of patients meeting their weight goals (86% vs 35%, p=0.003). 86% of nursing staff preparing and administering the regimens preferred the ready made tube feed (p=0.013) and rated it better for ease of preparation (100% vs 78%) and use (93% vs 79%). Preparation and administration of the current regimens took on average 15–55 min longer per patient per day than the ready made tube feed.

Conclusion The ready made 800 kcal nutritionally complete tube feed provided a more nutritionally adequate intake than current tube feeding regimens. It was also practically easier and quicker to use than current regimens, allowing more appropriate utilisation of healthcare resource and time, providing an easier solution for the use of low energy tube feeding regimens in the home care setting.

Competing interests G Hubbard Employee of: Nutricia, H Finch: None declared, R Stratton Employee of: Nutricia.

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