confident giving advice on vaccinations. Results support the need for further travel specific research and better education in both groups.

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Disclosure of Interest None Declared.

PTU-093 AN EVALUATION OF AN IBD ADVICE SERVICE: IS IT MEETING ITS SERVICE AIMS?

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Introduction The provision of a dedicated and accessible IBD advice service (AS) is a key element of IBD management and, often, the responsibility of the Advanced, or specialist, IBD Nurse according to the N-ECCO Consensus statements. UK IBD Standards require IBD patients to have rapid access to specialist advice before the end of the next working day (EONWD). Our AS aims to provide timely access to clinical advice, support and acts as a point of contact to co-ordinate the patient journey. We evaluated if our advice service was meeting these goals.

Methods Over a 5 week period (23 working days) during October and November 2013, all contacts to the AS of a central London tertiary IBD service were recorded. Patients either called and left a message on an answering machine, or emailed a dedicated email address. Two experienced IBD CNS' collected data during each encounter. This included demographics of gender, age, and diagnosis; the format of contact (phone/email); if a medical opinion (IBD specialist or IBD registrar/fellow) was sought; time to response, and amount of time spent on each contact. The content of the encounter (administrative, clarification, a new query, or a symptomatic change/flare) was documented along with the response (administrative, information, results, treatment changes, medical decision), and the follow up required for the patient (routine, earlier or urgent outpatient appointment, or hospital admission/presentation to AandE).

Results 262 contacts were made to the AS. 4 could not be re-contacted and 23 had missing data, leaving 235 complete encounters for analysis, of which 3 enquiries were non-IBD related. Those who contacted the AS were predominantly female (148/235, 62.98%), between 26–35 (97/235, 41.28%), with a diagnosis of Crohn's Disease (160/235, 68.09%), the latter reflecting the tertiary nature of our IBD service. 99.15% (233/235) of contacts were replied to by EONWD, with 38.29% (90/235) answered within 12 h. The majority of contacts (85.11%) were for clinical reasons with 14.89% administrative (35/235). 51/235 (21.70%) pertained to flares. 88.94% (209/235) were autonomously handled by the IBD CNS though IBD Consultant/Fellow support was required in 26 cases. AandE presentation was recommended to 2 patients (2/235, 0.85%) and 25(10.64%) had their outpatient appointment brought forward, meaning the vast majority were clinically managed without the need for additional outpatient review.

Conclusion Our IBD advice service provides patients with rapid access to specialist advice, symptom management and disease-specific information, meeting UK national standards. The IBD CNS' expertise means clinical enquiries can be effectively managed whilst avoiding additional, unnecessary burden to the patient and to outpatient clinics.

Disclosure of Interest None Declared.

PTU-094 DO WE NEED POST INFLIXIMAB INFUSION MONITORING?

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Introduction Infliximab is used in the treatment of inflammatory bowel disease. It is administered as an intravenous infusion over 2 h with a 2 h monitoring period. Accelerated infusions have been shown to be safe and well tolerated,[1] reducing nursing time and increasing patient satisfaction.[2] It has been suggested that post infusion monitoring may not be necessary,[3] and it was our aim to establish this.

Methods 310 infusions were administered to 103 patients over 6 months (January to July 2013). Infusions 1–4 were administered over 2 h with 2 h monitoring, 5–9 over 1 h with 1 h monitoring, and 10 onwards over 30 mins with no monitoring.

A reaction was classified as mild if no action was required and severe if symptoms required immediate action or treatment withdrawal. A drop in systolic BP of ≥20 mm/Hg was recorded. Treatment of reaction and outcome were documented, including occurrence during or post infusion. Details of any delayed reactions post discharge were obtained from patient notes.

Results Of 41 patients receiving infusions 1–4, 2 patients (4.87%) had an infusion reaction. One mild, and one severe. Both occurred during the first infusion. Both had previously been treated with infliximab.

In 35 patients receiving infusions 5–9, 1 patient (2.86%) experienced a mild reaction during infusion 7, then a severe reaction during infusion 9.

No infusion reactions were observed during infusions 10+ (122 infusions in 37 patients). 11 patients had infusions 10+ over 1–2 h due to side effects with accelerated infusions or 10 mg/kg dose. These patients were not monitored post infusion.

One patient was hospitalised due to a delayed reaction one week after infusion 1 (previous infliximab treatment 108m). No side effects were observed during the infusion or monitoring period.

No reactions were recorded during the monitoring period in any of the treatment groups. One patient had a drop in systolic BP (22 mg/Hg) during the monitoring period of their 5th infusion. No action was taken and the patient was discharged.

Conclusion This audit has demonstrated that post infliximab monitoring is not necessary. We estimate that this would save 494 h of patient and nurse time per annum at our centre.

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Disclosure of Interest None Declared.

PTU-095 BIFIDOBACTERIUM SPECIES REDUCE LIPOPOLYSACCHARIDE-INDUCED SMALL INTESTINAL EPITHELIAL CELL SHEDDING *IN VIVO* IN A MYD88-DEPENDENT MANNER AND PROTECT AGAINST DSS-INDUCED COLITIS

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Introduction Cell shedding, the process by which intestinal epithelial cells (IECs) are extruded from the small intestinal (SI) villus is known to be elevated in patients with inflammatory bowel disease (IBD) and is correlated with disease relapse. Importantly, there is evidence that the gut bacterial communities (microbiota) influences intestinal epithelial function including gene expression, cell division and energy balance. We thus sought to determine whether specific members of the microbiota, 'probiotic' bifidobacterial species, modulate rates of cell shedding and progression of Dextran sodium sulphate (DSS)-mediated colitis.

Methods C57BL/6 mice (WT) or mice deficient in epithelial Myd88 (Vil-Cre +; Myd88 -/-) (Myd88 KO) were orally gavaged with 1 × 10^9*Bifidobacterium breve UCC2003*, *B. longum* NCIMB8809 or PBS (control) in 3x daily doses. To induce SI cell shedding, mice were injected with 1.25 mg kg-1 Lipopolysaccharide (LPS) intrapertioneally. Animals were euthanized 1.5 hr post-LPS and SI tissue sections analysed for cleaved caspase 3 (CC3) by immunohistochemistry to score shedding along the first 50 cell positions from the villus tip. For colitis studies, control mice or mice colonised with *B. breve* were administered 2% DSS in drinking water for 6 days and euthanized 8 days post-DSS. Disease activity index (DAI) was recorded daily and histology performed on formalin-fixed tissue sections including periodic acid/Schiff (PAS) stain (goblet cell stain).

Results Mice receiving *B. breve* and *B. longum* showed less CC3 +ve shedding cells (3.6% +/-0.6, $p < 0.001$ and 7.6% +/-2.9, ns, respectively) compared to WT mice (10.6%+/-1.3). Interestingly, the protective effect of *B. breve* was lost in Myd88 KO mice receiving LPS as numbers of CC3 +ve IECs were the same in mice receiving *B. breve* or vehicle control (13.3%+/-1.7 vs 10.4%+/1.3; ns), indicating that the protective effect may be mediated by Toll-like receptors. In our colitis model, mice colonised with *B. breve* had reduced DAI compared to control mice, coupled with a significant increase in numbers of PAS +ve goblet cells per crypt (8.2%+/1.6 vs 16.0%+/-0.6; $p = 0.05$).

Conclusion Bifidobacterial species modulate a reduction in rates of cell shedding from the SI villus, potentially via the Myd88 signalling pathway. *B. breve* is also able to partially ameliorate the adverse effects of DSS-induced colitis through induction of goblet cells. In summary, bifidobacteria, particularly *B. breve*, may be beneficial as a therapeutic agent for IBD.

Disclosure of Interest None Declared.

PTU-096 COST EFFICIENCY OF FAECAL CALPROTECTIN IN ASSESSING NEW REFERRALS WITH ALTERED BOWEL HABIT

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Introduction Altered bowel habits (ABH) is one of the commonest reasons for referral to the gastroenterology clinic. The spectrum of organic and functional bowel symptoms provides a diagnostic dilemma. Functional bowel disorders are common, occurring in 15–20% of Western populations.[1] Therefore, it is important not to create an economic burden by over-investigation.

Faecal calprotectin (FC) is a protein released from neutrophilic leucocytes into the intestinal lumen in response to mucosal inflammation. It is a well-validated, non-invasive test that can differentiate between organic and functional bowel disease with 93% sensitivity and 96% specificity.[2] These features make FC measurement a useful objective test in guiding further investigations.

Methods Over a 2 year period, all FC data was collected in new patients referred to the outpatient clinic for further assessment of ABH and where a diagnostic dilemma existed. Results were recorded as normal (<50 μg/g), borderline (50–100 μg/g) or positive (>100 μg/g) and correlated with the use of further endoscopic or radiological assessment. Department of Health (DoH) tariffs were used to assess cost burden and potential savings.

Results 275 FC measurements were performed in new referrals where there was a dilemma about diagnosis or need for further investigation. Colonoscopy was spared in 71% (196/275), including 139/164 normals, 16/22 borderline and 35/89 positives.

Despite a normal FC result, 25 patients underwent endoscopic investigation after initial assessment. Of these, 16 procedures were normal, 4 had diverticular disease and 2 had low grade dysplastic polyps. Some patients underwent CT colonography with positive findings in 4/17 of the normal FC group (3 diverticular disease, 1 incidental gastric malignancy), 0/2 with borderline FC and 8/15 with positive FC measurement (5 diverticular disease, 1 suspected ileal ulcer, 2 cancers).

If all 275 patients had undergone colonoscopy the cost for the Clinical Commissioning Group (CCG) would be £154275. Risk stratifying with FC assessment reduced this to £44319, saving £109956.

Conclusion Faecal calprotectin assessment saved 71% of possible colonoscopies in those new patients assessed for ABH where there was a dilemma as to whether endoscopic investigation was necessary. This provided clinicians with the confidence to diagnose and manage functional bowel symptoms earlier. FC testing also saved our CCG £109956 of potentially unnecessary colonoscopy with the simultaneous advantage of reducing endoscopy waiting times.

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Disclosure of Interest None Declared.

PTU-097 THE BENEFITS OF USING FAECAL CALPROTECTIN AS A MONITORING TOOL TO ASSESS INFLAMMATORY BOWEL DISEASE AND PRE-EMPTIVELY UPREGULATE TREATMENT IN ASYMPTOMATIC PATIENTS

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Introduction Calprotectin is an abundant neutrophil protein that is released during inflammation. The level of faecal calprotectin