

**Abstract PTH-124 Figure 1** Comparison of patient faecal calprotectin levels before

**Conclusion** If tolerated, tacrolimus can be an effective treatment option for patients with ulcerative colitis. This response was maintained for an average of 21 months, with a significant drop in faecal calprotectin levels.

#### PTH-125 THE CLINICAL UTILITY AND DIAGNOSTIC ACCURACY OF FAECAL CALPROTECTIN FOR IBD IN PAEDIATRIC PATIENTS

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**Introduction** Faecal calprotectin (FCP) has an established place in the adult diagnostic pathway. Its role in the paediatric population, where triage for colonoscopy is vital, is less well studied. There is increasing awareness that the normal range for FCP and the prevalence of IBD vary with age. We aimed to determine the most effective use of FCP in paediatric patients presenting with GI symptoms.

**Methods** We conducted a retrospective analysis of FCP results for patients aged  $\leq 18$  years presenting to paediatric gastroenterology at a London teaching hospital from 2013 to 2014. Demographic and clinical information, including final diagnosis of IBD, was extracted from the Electronic Patient Record. In patients with multiple FCP results, the earliest was used. Abnormal FCP was defined as  $\geq 50\mu\text{g/g}$ . Contingency tables for FCP and IBD were generated for the total cohort and grouped by age  $< 10$  years and  $\geq 10$  years. Sensitivity, specificity, positive predictive values (PPVs), negative predictive values (NPVs) and pre- and post-test probabilities were calculated.

The analysis was repeated in patients aged  $< 10$  years using an FCP threshold  $\geq 160\mu\text{g/g}$ , which has been adopted locally as the cut-off in this group. Complete case analyses were used where data were missing. Stata version 13.1 was used for all statistical analyses.

**Results** 356 FCP samples were sent from 328 patients. 49.9% were male, and median age was 10.9 years (range 0.1–18.7). 134 patients (41%) had an abnormal FCP. 90 patients (27.4%) were diagnosed with IBD. The median FCP for patients with IBD was  $408.5\mu\text{g/g}$  vs.  $18\mu\text{g/g}$  for those without IBD. Using an FCP threshold of  $\geq 50\mu\text{g/g}$  for IBD vs. non-IBD the overall sensitivity was 76.7%, specificity 72.4%, PPV 52.6% and NPV 88.6%. In patients  $< 10$  years old, the sensitivity was 100%, specificity 70.2%, PPV 21.7% and NPV 100%. The pre-test probability was 7.6% (low) and post-test probability 21.6%. In patients  $\geq 10$  years old, the sensitivity was 73.8%, specificity 75%, PPV 69.4% and NPV 78.8%. The pre-test probability was 43.5% (intermediate) and post-test probability 69.3%. Increasing the FCP threshold to  $\geq 160\mu\text{g/g}$  in patients  $< 10$  years old improved the specificity to 85.1%, but at the expense of sensitivity, which decreased to 80%. The PPV was 30.8%, NPV 98.1% and post-test probability 30.6%. Colonoscopy was carried out in 133 patients (42%), median age 12.5 years (range 0.2–18.5), of which 49 (36.8%) had a normal FCP.

**Conclusions** FCP is highly accurate at excluding IBD in paediatric patients with GI symptoms and should guide the need for colonoscopy. In low prevalence populations, such as those aged  $< 10$  years, a positive result should be interpreted with caution.

#### PTH-126 AUDIT OF BIOLOGICAL THERAPY FOR INFLAMMATORY BOWEL DISEASE: RESULTS FROM THE UK IBD REGISTRY

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**Introduction** Ensuring the safe, appropriate and effective use of costly biological agents presents a significant challenge for healthcare systems. Although no longer funded as a national audit programme, NHS England has identified audit of biologics for IBD as a priority area for QI activity for hospitals (Quality Accounts List). The UK IBD Registry provides a system for collecting, submitting and reporting data to support participation in biologics audit.

**Methods** Participating centres submit quarterly extracts of standardised data collected via a range of software solutions,

**Abstract PTH-126 Table 1**

Key Performance Indicator, mean% (% sites below mean)	All Sites (n=65)	0–19 cases (n=22)	$\geq 20$ cases (n=43)
1 Infection screening before starting drug (naïve only)	69.7 (31%)	75.4	69.5
2 Assessment of disease activity (pre-treatment)	35.7 (38%)	39.5	35.6
3 Registry consent recorded	39.1 (41%)	32.9	39.4
4 Post-induction review recorded	38.4 (45%)	36.9	38.5
5 Assessment of disease activity (post-induction review)	38.3 (25%)	35.3	38.4
6 Twelve month review recorded	34.5 (32%)	15.4	35.3
7 Assessment of disease activity (twelve month review)	40.0 (20%)	33.3	40.2

including demographics, clinical characteristics, infection screening, drug initiations, clinical review visits and disease activity scores. Eligible cases for audit require a record of drug start date and baseline visit. Algorithmic analysis identifies most relevant review visit and associated disease score if recorded (time-windows: post-induction, 8–16 wks; 12-month review, 44–60 wks). The rolling audit focuses on seven key performance indicators (KPIs). Cumulative results are presented, focused on each patient's first biologic initiation (April 2016 – Present).

**Results** 3,617 eligible cases (CD: 61%; UC: 35%; IBD-U: 3%). Humira 36%; Remsima 24%; Inflectra 18%; Vedolizumab 14%; Remicade 3%; Golimumab 2%; Ustekinumab 2%; Not specified 1%.

**Table 1** shows mean KPIs (%) across all sites, and sub-divided by eligible cases. Across the seven KPIs, 20–45% of hospitals had results below the registry-wide mean value (arbitrary benchmark).

**Conclusions** The UK IBD Registry is supporting a growing network of hospitals with participation in continuous biologics audit, providing benchmarking reports to drive local and registry-wide quality improvement. Although incomplete case ascertainment and missing data are inevitable challenges, the biologics data is maturing as sites establish live registers. Results highlight an ongoing need for most centres to improve biologics monitoring through better-organised and documented review visits with objective recording of standardised outcomes.

#### PTH-127 THE LIVED EXPERIENCES OF BRITISH SOUTH ASIAN WOMEN WITH INFLAMMATORY BOWEL DISEASE: A QUALITATIVE STUDY

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**Introduction** The rates of inflammatory bowel disease (IBD) amongst the British South Asian (SA) populations is growing, with some evidence indicating British SA are disproportionately more likely to suffer from IBD than White European. There is a limited understanding of the experience of SA women with IBD, where high rates of infertility, voluntary childlessness and fewer children are common compared to the general population. The objective of this study is to explore how South Asian women with IBD experience living with their chronic illness within dominant SA culture, where childbearing and parenthood are considered culturally mandatory.

**Methods** A qualitative methodology was adopted using Critical Discursive Psychology (CDP). A total of eight SA women, aged between 19–50, were recruited through two IBD clinics in West Midlands hospitals. Unstructured one to one interviews were audio recorded and analysed using CDP methods.

**Results** Data analysis revealed that SA culture and IBD is seen as a hindrance to female worth, marriage and parenthood prospects. Further, there is a limited awareness of IBD that leads to secrecy and stigmatisation. Many SA women find coping with IBD difficult due to the perceived stigma regarding IBD and 'disease', lack of understanding about IBD (by patients before diagnosis, family and wider community), pressures regarding cultural mandatory marriage and parenthood,

and the role of food (particularly spicy food) in health and illness.

**Conclusion** This study has shown how IBD in SA women create significant personal and social challenges, which deviates from normative expectations of women in this community. It has raised awareness of the emotional and social impact of IBD, which is critical for service provision that suitably meets the needs of this population. This study has highlighted the need for sensitive and culturally-appropriate intervention for SA patients with IBD.

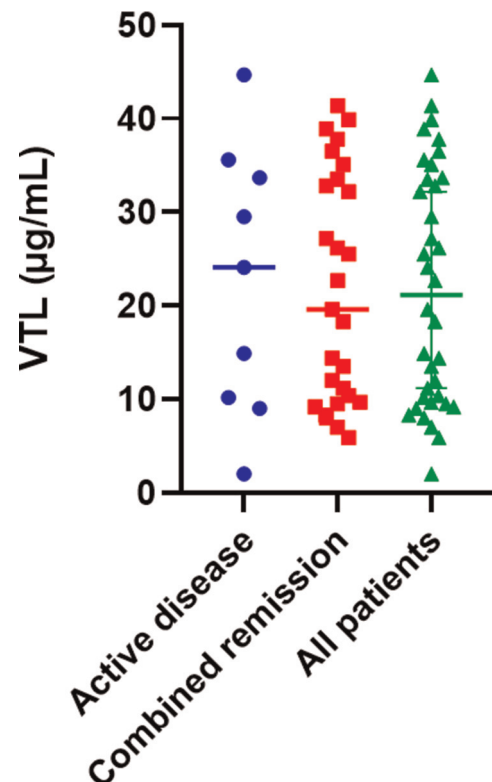
#### PTH-128 CORRELATION OF VEDOLIZUMAB TROUGH LEVELS WITH CLINICAL AND BIOCHEMICAL MARKERS IN INFLAMMATORY BOWEL DISEASE

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**Introduction** The clinical utility of vedolizumab (VDZ) trough levels (VTLs) is not well established. The aim of this study is to determine if there is a correlation between VTLs and clinical and biochemical outcome.

**Methods** We performed a prospective, cross-sectional study to examine the association between VTLs and clinical and biochemical outcomes. VTLs immediately prior to VDZ infusion were collected simultaneously with CRP and Harvey Bradshaw index (HBI)/Simple Clinical Colitis Activity index (SCCAI) (for Crohn's disease, CD, and ulcerative colitis, UC, respectively). Biochemical remission was defined as CRP  $\leq$  5 mg/L and clinical remission was defined as HBI  $\leq$  4 or SCCAI  $\leq$  2. Combined remission was defined as those meeting criteria for both



Abstract PTH-128 Figure 1 Combined remission graph