Abstract PWE-225 Table 1

	UC			CD			IBS	Healthy
	≤2	3–4	≥5	≤3	4–5	≥6		
Mean and SD (μg/ml)	13±22.1	59.5±44.8	24.5±31.1	9±12.7	11±8.9	117±266	1.4±1.8	0.8±1.2
Median (μg/ml)	4.1	78.2	9.3	7.8	8.6	12.4	0.5	0.44

Competing interests None declared.

REFERENCE

1. Baveye S, Ellass E, Mazurier J, et al. Lactoferrin: a multifunctional glycoprotein involved in the modulation of the inflammatory process. *Clin Chem Lab Med* 1999;**37**:281–6.

PWE-226 ARE IBD SERVICES UP TO STANDARD?—RESULTS FROM 1ST ROUND OF THE UK INFLAMMATORY BOWEL DISEASE QUALITY IMPROVEMENT PROJECT (IBD QIP)

doi:10.1136/gutjnl-2012-302514d.226

¹I Shaw,* ²E Fernandez, on behalf of IBD QIP Steering Group. ¹Gloucestershire Royal Hospital, Gloucester, UK; ²Clinical Effectiveness and Evaluation Unit, Royal College of Physicians, London, UK

Introduction IBD is a common cause of gastrointestinal morbidity with an estimated 240 000 people affected in the UK. Successive rounds of the UK IBD Audit have shown variation in care and there is a recognised need to implement the National Standards for IBD Care that were published in 2009. The IBD QIP was established as a pilot project to explore the potential of a web based self assessment tool to assist services benchmark themselves against the standards and develop action plans to improve.

Methods The IBD QIP assessment tool was developed through a series of meetings consisting of representatives of key stakeholder groups, including patients. Statements relating to aspects of IBD care were identified from analysis of the Standards and UK audit results. These were then included in a web based tool, similar to the “GRS” used in UK endoscopy. All IBD services in the UK were invited to volunteer for the pilot and after a series of regional meetings, participating sites were provided with access to the tool and asked to complete their assessment and provide feedback on the process. Results were collated centrally and fed back to sites locally. The QIP web site, also included tools for formulating an action plan and a “Shared Document Store” for sites to submit examples of good practice that could be shared with others. Re-assessment is planned for March 2012.

Results 73 sites enrolled for the pilot (64 adult & 9 paediatric services), 62 (85%) of whom submitted data. 52/62 (90%) of sites met to complete the assessment as a multidisciplinary group with at least 2 disciplines represented. 93% of sites took <4 h to complete

the rating process. Overall results for all domains showed similar scores for adult and paediatric sites with 18, 17, 23 and 43% of adult and 14, 12, 26 and 48% of paediatric sites scoring A, B, C and D respectively. Representative scores for selected items from adult sites are shown in the following Abstract PWE-226 table 1 (n=56).

Conclusion We have demonstrated that it is feasible for services to use a web based self assessment tool to benchmark themselves against nationally agreed standards for IBD care. First round results show that the majority of services are currently failing to meet the UK IBD Standards, with two thirds of sites scoring at level C or D. Feedback from the pilot round is currently being used to refine the tool and re-assessment in March 2012 will give sites an indication of their progress.

Competing interests None declared.

PWE-227 OUTCOME OF CYTOMEGALOVIRUS COLITIS IN PATIENTS WITH IBD—EXPERIENCE FROM ROYAL UNITED HOSPITAL BATH

doi:10.1136/gutjnl-2012-302514d.227

¹I Ahmed,* ²N Kalsi, ³I Lane, ³L Biddlestone, ²T Mehta. ¹Department of Gastroenterology, University of Bristol/Royal United Hospital Bath, Bristol, UK; ²Department of Gastroenterology, Royal United Hospital Bath, Bath, UK; ³Department of Histopathology, Royal United Hospital Bath, Bath, UK

Introduction CMV infection has been described in patients with inflammatory bowel disease (IBD). It is considered to be responsible for relapse, increased severity and poor outcome if left untreated. Ganciclovir is the mainstay of treatment but data regarding its use, mode of administration and duration of treatment is poorly described. Studies have demonstrated favourable outcome with the use of antiviral treatment.

Methods We studied the medical records of patients with IBD and concurrent diagnosis of CMV since 2005. Record of investigations was obtained from hospital electronic resources. The parameters studied were duration and mode of treatment with Ganciclovir, clinical scoring using Harvey Bradshaw Index (HBI), CRP pre-treatment and on day 3, 7 and 14th of treatment, CMV PCR pre and post-treatment, detection of *Clostridium difficile* toxins (CDT) and outcome in term of colectomy or clinical improvement.

Results 13 patients with pre-existing diagnosis of IBD (UC=8, CD=3, non-specific colitis=2) were identified with a confirmed diagnosis of CMV on colonic biopsies between 2005 and 2011. The age range was 33–91 yrs (mean=68, F=6). 11/13 patients were admitted to hospital with flare of IBD and were steroid refractory. One was admitted with severe diarrhoea without IBD and the other had colectomy for severe UC and was found with CMV in the colectomy specimen. Out of 13, 11 patients were treated with Ganciclovir: six with 2 weeks of intravenous Ganciclovir 5 mg/kg, 3 with 1 week of intravenous and 2 with 1 week of intravenous followed by 2 weeks of oral Valganciclovir. Out of those treated, eight patients improved and were discharged, and three required colectomy. All six patients who received 2 weeks of intravenous treatment improved and were discharged. All three who required colectomy had 1 week of intravenous treatment and one had additional oral Vanganciclovir. CRP response was found to be non-predictive but improvement in HBI on day 3 of treatment was found to be associated with better outcome. None of the patients were positive for CDT.

Conclusion CMV colitis is associated with poor outcome in patient with IBD if left untreated. Data regarding mode and duration of treatment remain poorly defined; in our experience 2 weeks of intravenous Ganciclovir was associated with a better outcome. Little or no improvement in the clinical condition on day 3 of treatment was associated with colectomy. Further data are required to evaluate the treatment guidance of this condition.

Abstract PWE-226 Table 1

Patient experience	A	B	C	D
Rapid access	30	8	3	15
Education of patients	24	18	4	10
Clinical quality				
Access to nutritional care	6	7	8	35
Arrangements for use of immuno-suppressants	5	1	22	28
Surgery for IBD	15	12	10	19
Research, education and audit				
Participation in research	46	13	13	29
Training and education of IBD staff	4	18	64	14

Competing interests None declared.

REFERENCES

1. *European Evidence-Based Consensus on the Prevention, Diagnosis and Management of Opportunistic Infections in IBD, ECCO Guidelines*. 2009.
2. **Garrett Lawlor MD**, Alan C, Moss MD. CMV in IBD: Pathogen or innocent bystander? *Inflamm Bowel Dis* 2010;**16**:1620–7.

PWE-228 AN ASSESSMENT OF THE IMPACT 5ASA DOSE, DOSE INTERVAL, PREPARATION AND DELIVERY HAVE ON MAINTAINING REMISSION IN ULCERATIVE COLITIS

doi:10.1136/gutjnl-2012-302514d.228

J R O'Kelly,* I D Arnott. *GI Unit, Western General Hospital, Edinburgh, UK*

Introduction 5-Aminosalicylic Acid (5ASA) plays a key role in both induction and maintenance of remission in ulcerative colitis (UC). A number of questions remain poorly assessed by clinical trials including the role of dose, dose interval, preparation and delivery method in maintaining remission. We aimed to assess the value of preparation, dose, delivery method and dosing interval on the duration of first remission in patients with newly diagnosed UC.

Methods We retrospectively assessed an inception cohort of 100 newly diagnosed UC patients diagnosed between 2004 and 2008 and followed-up for 3 years. 69 patients took oral Pentasa and 11 took oral Asacol. The diagnosis adhered to the criteria of Lennard-Jones and clinical details were categorised according to the Montréal classification. Data were also collected on 5ASA maintenance drug (Asacol or Pentasa), dose (high dose or low dose), and delivery (oral or oral and rectal). Relapse was defined as an increase in symptoms needing an increase in anti-inflammatory therapy. Risk of relapse was evaluated using HR, and by using Cox regression to control for potential confounders.

Results From induction of remission to the end of our 3 yr follow-up, 76% of patients relapsed, with a mean time to relapse of 16 months. Mean daily dose taken of Asacol was 2.3 g/day (IQR 0 g/day) and Pentasa 2.4 g/day (IQR 2–3 g/day). We found no significant difference in the relapse rates between Asacol and Pentasa. (Relapse rate 7/11 Asacol vs 53/69 Pentasa, $c^2=0.574$, HR 1.78 ($p=0.19$)). We also found no significant difference between: relapse rates for patients taking high dose 5ASA vs low dose. (Relapse rate 9/10 high dose vs 42/58 low dose, $c^2=0.114$ HR 0.505 ($p=0.223$)); Oral and rectal vs oral alone (Relapse rate 10/12oral + rectal vs 59/77 oral, $c^2=0.374$, HR 0.49 ($p=0.09$)); Twice daily and once daily (Relapse rate 44/60 TD vs 5/6 OD, $c^2=0.306$, HR 2.12 ($p=0.43$)), and three times daily compared with twice daily (Relapse rate 20/23 TD vs 44/60 BD, $c^2=0.107$, HR 0.82 ($p=0.6$)).

Conclusion The duration of first remission in UC is variable and although 5ASA are effective the majority of patients will relapse within 3 years. These data demonstrate that relapse is influenced relatively little by high dose or bi-directional therapies and there were no differences in the preparations studied. This would indicate that concordance with therapy is a vital aspect of 5ASA efficacy and clinicians should reinforce this point when discussing therapy.

Competing interests None declared.

PWE-229 ASSESSING PATIENT REPORTED OUTCOME IN CROHN'S DISEASE

doi:10.1136/gutjnl-2012-302514d.229

¹J Wilburn,* ¹S R Crawford, ¹S P McKenna, ¹J Twiss, ¹M Ben-L'amri, ²K Kemp, ²S Campbell. ¹Galen Research Ltd, Manchester Royal Infirmary, Manchester, UK; ²Department of Gastroenterology, Manchester Royal Infirmary, Manchester, UK

Introduction Research into the impact of Crohn's Disease (CD) and its treatment on the patient relies on outdated and inappropriate

generic questionnaires. These do not address important impacts of the illness and ask questions of limited relevance. As part of a study to develop CD-specific patient-reported outcome measures (PROMS), qualitative interviews were conducted with CD patients.

Methods Item generation was based on the International Classification of Functioning, Disability and Health (ICF) and the needs-based quality of life (QoL) models. Interviewees were recruited via out-patient clinics and interviewed in a private room or at the researcher's offices. Interviews covered all aspects of the impact of CD and its treatment and were audio-recorded. Transcripts were content analysed to identify impacts on symptoms, activity limitations and QoL.

Results 26 patients (69.2% female; aged 25–68; mean (SD): 46.2 (14.7) years) were interviewed. Participants had a wide range of duration of CD (2–40; mean (SD): 13.0 (12.9) years). 2641 statements relating to the impact of CD were identified. These statements fell into three major categories with a number of sub-themes identified: Symptoms (such as pain, fatigue and emotional impairment), activity limitations (such as difficulties with walking, lifting and jobs around the house) and QoL (including preoccupation with the disease, self-conscious of appearance and reduced socialisation).

Conclusion The study was successful in identifying the most important impacts of CD from the patients' perspective. In addition to generating potential items for the new measure the findings of the interviews have implications for clinical practice and clinical trial design. Audit of services and assessment of new interventions for CD should assess whether or not these impacts of CD are improved. Only then will it be possible to determine whether interventions are of true benefit to the patient.

Competing interests None declared.

PWE-230 AN IRON-RESPONSIVE PROBIOTIC TO TREAT INFLAMMATORY BOWEL DISEASE

doi:10.1136/gutjnl-2012-302514d.230

¹J Bailey,* ²C Probert, ¹T Cogan. ¹School of Veterinary Science, University of Bristol, Bristol, UK; ²Department of Gastroenterology, Institute for Translational Medicine, University of Liverpool, Liverpool, UK

Introduction Iron is an essential cofactor in most biological systems. Lactic acid bacteria (LAB), frequently employed as probiotics, are unusual in having little or no requirement for iron. In the intestine of inflammatory bowel disease (IBD) patients increased availability of iron following oral iron supplementation or intestinal bleeding enhances growth and virulence of many pathogens against which LAB cannot compete. We have previously identified an iron-responsive LAB, *Sreptococcus thermophilus* NCIMB 41856, with probiotic potential based on functionality in in vitro models which could be competitive during active disease. In order for this strain to be used as a probiotic treatment in IBD patients it must be safe, able to survive gastrointestinal transit and preferentially adhere to epithelial cells and colonise.

Methods Adhesion to the human epithelial cell lines, T84 and Caco-2, was investigated and the ability of *S thermophilus* NCIMB 41856 to abrogate binding of potential pathogens, in particular adherent-invasive *Escherichia coli* examined in vitro. The strain was also subjected to in vitro safety tests which included the production of ammonia, indole, phenols, amines, hydrogen peroxide and D-lactate. Antibiotic resistance was examined, including detection of transmissible antibiotic resistance. Ability to survive within a low pH environment was determined, as was enzyme activity and metabolism of carbohydrates.

Results The strain was found to be capable of binding to epithelial cells and reduce the binding of potential pathogens, while not causing cellular damage itself. It produced no harmful metabolites