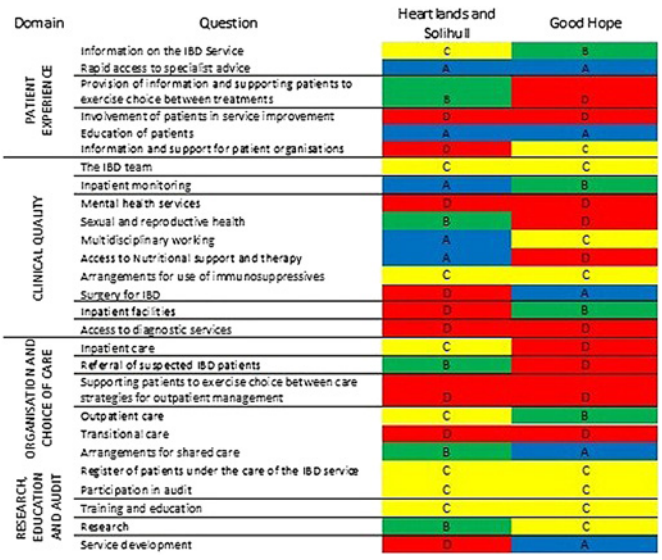
covers a large geographical area and differing population sizes. Despite now existing within the same directorate services have maintained their historical ways of working. (3) This assessment has provided a catalyst for joint working and improved care for patients.



Abstract PMO-254 Figure 1

Competing interests None declared.

REFERENCE

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PMO-255 THE EXPRESSION OF INTERLEUKIN 2 RECEPTOR IN INTESTINAL RESECTION SPECIMENS FROM PATIENTS WITH CROHN'S DISEASE AS ASSESSED BY IMMUNOHISTOCHEMISTRY

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Introduction Interleukin-2 (IL-2) is a key cytokine in inflammatory pathways involving T-cells. Several studies assess the potential of IL-2 scintigraphy to quantify T-cell infiltrates in conditions such as diabetes, coeliac and Crohn's Disease (CD). To assess the potential utility of IL-2-based Positron Emission Tomography (PET) radioligands that target the IL-2 receptor (IL-2R) in Crohn's disease imaging, we examined the differential expression of the α-subunit of the IL-2R (CD25) in intestinal resection specimens from patients with CD.

Methods Stored, formalin-fixed paraffin-embedded blocks from Crohn's intestinal resection specimens were retrieved. Four 1μm-thick consecutive sections from each block were stained with H&E and CD25 (CD25 1:100, Leica NCL-CD25:305). A pathologist carried out a semi-quantitative grading of acute and chronic inflammation from H&E stained slides attributing a score of 0–3 for each of the two components. Their sum represented the Global Inflammatory Score (GIS). Specimens were subcategorised on the basis of GIS into Group A (GIS 0–1, no or mild inflammation), Group B (GIS 2–4, moderate) and Group C (GIS 5–6, severe). While blinded to the GIS, the pathologist quantified CD25 expression by counting CD25+ve cells in 1mm-wide full thickness regions of bowel wall on slides containing complete, well-orientated mucosa, submucosa and muscularis propria. Results were expressed as CD25 +ve cells/mm^2. Groups were compared using the Mann–Whitney test. In addition, qualitative co-localisation studies of CD25 and CD3 (CD3 1:50 Leica NCL-L-CD3-565) or CD45 (CD45 1:100 Dako M0701) were performed on a sub-selection of six slides.

Results 12 sets of slides were produced from five resection specimens. A median of 3 (range 2–6) 1 mm wide well orientated bowel wall regions were scored on each slide (total 41). Of these, 15 (37%) were in Group A, 12 (29%) in Group B and 14 (34%) in Group C (see above). Median CD25+ve cell count per mm^2 was 2.04 (range 0.32–6.94), 2.74 (range 0.97–13.86) and 8.89 (range 2.14–59.66) respectively. CD25 was significantly more abundant in Group C than in Group A ($p=0.0005$) and Group B ($p=0.019$). The difference in CD25 expression between Groups A and B did not reach statistical significance ($p=0.08$). Co-localisation studies of CD25 and CD3 or CD45 suggest that the majority, but not all CD25 expression occurs on leucocytes (CD45 positive cells) and specifically T-lymphocytes (CD3 positive cells).

Conclusion IL2R was significantly more abundant in areas with a severe inflammatory infiltrate, therefore 18F-IL2 PET scanning could be useful in delineating such areas. CD25 appears predominantly but not exclusively expressed on T-cells.

Competing interests None declared.

PMO-256 THE REALITY OF THE TOLERANCE AND EFFICACY OF ORAL IRON IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE (IBD)

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Introduction Iron deficiency anaemia (IDA) is the most common complication of Inflammatory Bowel Disease (IBD) and impacts negatively on patients' quality of life. The aim of this audit was to explore the use and tolerability of oral iron supplementation in IBD practice.

Methods We used a patient directed questionnaire aimed at adult IBD outpatients over a 7-week period at the Queen Elizabeth Hospital. The use of oral iron therapy was ascertained in patients treated over 20 years. Patients were asked about the type of iron taken, dosing frequency, duration, side-effects and completion of therapy. We calculated the number of patients whose anaemia had resolved and where the data were available, the efficacy of treatment was determined by the mean change in haemoglobin (Hb) from baseline.

Results 91 IBD patients who received iron were surveyed, (62 Crohn's disease, 27 ulcerative, 2 microscopic colitis). All received oral iron (73 ferrous sulphate, 15 ferrous fumarate and 3 ferrous gluconate) and 17 also received intravenous (IV) iron. There were 56 females and 35 males. Variable dosing regimens were followed: 31.5% taking iron once, 37% twice and 31.5% three times daily. Although 69% patients were able to complete the course of oral iron, 31% had to abort treatment due to intolerance, which was unrelated to dose frequency. Only 35 patients (38%) were able to complete their intended course of oral iron without any side effects. Of these patients, the baseline Hb (mean 11.1 g/dl, range 8.9–13.3) returned to reference baseline in only 51% patients, with average Hb change 1.43 (range −0.7–4.7). Side effects were reported in 52% patients who received oral iron, including nausea and vomiting (21%), abdominal pain (19%), constipation (19%) and diarrhoea (18%.) However, despite side effects the average duration of treatment in this cohort was 10.3 months (range 0.03–156), 19.3 months (range 1–240) in patients without side effects and 5.2 months (range 0.03–36) in intolerant patients who had to cease treatment. No adverse effects were reported in the 17 who received IV iron.

Conclusion Although oral iron is a cheap and convenient treatment for IDA, over half of the patients in this study experienced gastrointestinal side effects, a large proportion remained anaemic and for many the treatment course was long. Despite iron therapy IDA prevalence in this group remains high and it seems the efficacy of oral iron treatment is poor in this setting. We propose that prescription of iron therapy in IBD patients should be trialled with a defined duration of treatment and a target end point Hb. Those who fail to tolerate or do not respond adequately should consider an alternative form of iron therapy such as IV iron.

Competing interests None declared.

PMO-257 COST-EFFECTIVENESS AND COST COMPARISON OF INTRAVENOUS IRON PREPARATIONS IN PATIENTS WITH IBD-ASSOCIATED IRON DEFICIENCY ANAEMIA BASED ON THE FERGIMAIN TRIAL

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Introduction Anaemia is a costly complication of IBD and a common trigger of hospitalisation. The FERGImain trial, a multi-centre, randomised, placebo-controlled study, demonstrated that on-demand ferric carboxymaltose (FCM) reduced recurrence of anaemia in non-anaemic IBD patients, which received either FCM or placebo when ferritin-levels fell <100 µg/l. Time to anaemia was assessed within 8 months. We present economic results for this trial and compare costs with those expected for the use of low molecular weight iron dextran (ID) from the perspective of the UK National Health Service.

Methods Patients were analysed when at least one haemoglobin value at baseline and a subsequent value was available (204 randomised and treated (105 FCM, 99 placebo)). Trial-based information on medical resource use was combined with UK prices for drugs, wages and materials. Starting from the single administered dose of FCM (500 mg within 15 min) a comparative cost-analysis was performed against ID (500 mg within 4 h). Incremental costs per avoided anaemia case were calculated.

Results Time to recurrence of anaemia in patients treated for low ferritin was significantly longer in the FCM group (HR 0.62 [95% CI 0.38 to 1.00], Kaplan–Meier analysis; p=0.049, log-rank test). By month 8, anaemia had recurred in 26.7% (FCM) and 39.4% (placebo) of patients. Total costs (including hospitalisation) added up to £499 (±1453, SD) in the FCM arm and £319 for placebo (±1390 SD). The average cost per avoided anaemia case over the study period was £1414. Drug and administration costs for FCM totalled to £231 (£189 and £41, respectively), for a mean cumulative dose of 990 mg iron administered per patient over the study period. Compared to FCM, drug and administration costs for an equal dose of ID would be £517 (£79; £438), respectively.

Conclusion Prevention of anaemia recurrence with FCM is effective and associated with additional costs. However, as treatment costs for single-anaemia episodes are not available, our data on costs per avoided anaemia case is difficult to interpret. In comparison, yearly costs in 2001 for a single anaemic IBD patient have been estimated to £7442 ($10 687). The hypothetical use of ID may save drug costs on the expense of administration costs.

Competing interests F Gutzwiller: Grant/Research Support from: Vifor Pharma Ltd, Switzerland, Conflict with: received a travel grant from Vifor Pharma Ltd, Switzerland, P Blank: Grant/Research Support from: Vifor Pharma Ltd, Switzerland, C Gasche: Conflict with: grant and consultancy honoraria from Vifor International, Pharmacosmos A/S, Fresenius Medical Care, Renapharma Sweden, R Evstatiev: None declared, M Schwenkglenks: Grant/Research Support from: Vifor Pharma Ltd, Switzerland, T D Szucs: Grant/Research Support from: Vifor Pharma Ltd, Switzerland.

PMO-258 UNDER THE MICROSCOPE: A REVIEW OF THE MANAGEMENT OF MICROSCOPIC COLITIS ACROSS NORTH EAST ENGLAND

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Introduction Microscopic colitis (MC) encompasses lymphocytic (LC) and collagenous colitis (CC) and typically presents with chronic watery diarrhoea. This retrospective review of biopsy proven cases from 5 DGH reports the clinical characteristics, possible drug precipitants, treatment and outcome in 49 cases.

Methods Retrospective review of patients with histopathological confirmation of MC over a 6-month period between July 2009 and December 2009 across two FTs (5 DGHs). Demographics, clinical presentation including suspected precipitant drugs, investigations, treatment, evolution, and screening for AI diseases were collected. For patients discharged from hospital follow-up, their GPs were contacted to evaluate ongoing symptoms.

Results 49 patients (38 females and 11 males) fulfilled the diagnostic criteria for MC (15 LC and 34 CC). Mean age 66 years (34–90). Mean symptom duration prior to diagnosis was 4.6 months (1–24 months). Main symptoms at the time of diagnosis; diarrhoea (100%), abdominal pain (24.4 %), weight lost (6.1%) and faecal incontinence (8.1%). Diagnosis made by flexible sigmoidoscopy (38.7%) or colonoscopy (61.3%). All patients offered clinic FU (4 DNA). Endoscopic findings reported as grossly normal in all cases. 41 patients were discharged back to GP care and 8 were under active FU in clinic. Of the 41 discharged patients, 10 had at least 1 further flare up of symptoms within 1 year of being discharged. 16 patients were treated pharmacologically: 3 with 5-ASA and 13 with oral Budesonide; 13 had an initial remission and in 6 remained symptomatic at the time of this review. 31 patients (63.26%) did not receive therapy and eight of those reported recurrent flare ups. 36 patients (73.46%) had received drugs reported to be associated with LC at some point and in 22 (61.11%) these had not been discontinued; of these, 7 (22.58%) reported at least one flare up. By registering all medications at diagnosis we found 22 patients were on PPIs, 12 patients on NSAIDs and 8 patients on SSRIs. Coeliac serology was checked in 27 patients and was positive in one patient. 12 patients (24.48%) gave a history of AI diseases.

Conclusion In the absence of specific guidelines, management of MC was highly variable. Only 55.1% of cases were screened for coeliac disease and possible drug precipitants were not routinely detected and in 61.11% of cases these drugs were not discontinued. Gross endoscopic appearances were normal in all cases, reinforcing the need to take colonic biopsies in all cases of unexplained diarrhoea. While the majority of patients were discharged from follow-up, a significant number had re-attended in primary care with recurrent symptoms suggesting the disease burden may be underestimated. Specific national guidelines for the investigation, treatment and follow-up of MC would be valuable.

Competing interests None declared.