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.

PMO-254

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 sцинтigraphy 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 ‘ligands that target the IL-2 receptor (IL-2R) in Crohn’s Disease (CD). To assess the potential utility of IL-2-based PET imaging in Crohn’s disease imaging, we examined the differential expression of the ligands that target the IL-2 receptor (IL-2R) in Crohn’s disease imaging. 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, dosage 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.

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 sub categorised 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/mm². 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 mm² was 2.04 (range 0.52–6.94), 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.

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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, dosage 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 gluco-nate) 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 55 patients (58%) 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 8.9–13.5) 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 10.5 months (range 0.05–156), 19.3 months (range 1–240) in patients without side effects and 5.2 months (range 0.05–56) in intolerant patients who had to cease treatment. No adverse effects were reported in the 17 who received IV iron.

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