significant area of unmet clinical need and reduce associated morbidity and healthcare costs.

REFERENCE

1. Zinicola R, *et al.* Haemorrhagic radiation proctitis: endoscopic severity may be useful to guide therapy. *Int J of Colorectal Dis* 2003;18(5):43–4.

PWE-049 ASSESSMENT OF RESPONSE AND TOLERANCE TO ORAL IRON SUPPLEMENTS IN PATIENTS WITH ANAEMIA

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Introduction Iron deficiency anaemia (IDA) is associated with “classical” signs and symptoms such as pallor and koilonychia. Tolerance to oral iron supplements is variable.

Aim We recorded the classical signs and symptoms of iron deficiency in patients presenting to 2 week wait IDA clinic. We also assessed patients’ tolerance to oral iron supplements and subjective response.

Patients and methods Patients referred to our iron deficiency clinic were assessed for symptoms and signs of iron deficiency using a proforma. All patients were started on oral ferrous sulphate 200 mg twice daily. Clinical response and tolerability were assessed at 1 and 3 months.

Results There were 336 patients with iron deficiency anaemia and 58 patients with other types of anaemia, mainly anaemia of chronic disease. There were no differences in baseline characteristics between the two groups.

In patients with IDA, the most frequent symptoms of iron deficiency were pallor (42.9%), hair loss (16.4%), less commonly ridges (3.0%), glossitis (1.5%), koilonychia (0.9%) or cheilosis (0.6%). Patients responded to iron supplements and

reported reduction in fatigue. Most frequently reported side effects related to oral iron supplements were black stools (66.8%), diarrhoea (20.0%), constipation (20.6%), pruritus (20.0%), abdominal discomfort (20.0%) and nausea (11.1%). 11.1% patients with IDA required dose adjustment or intravenous supplements.

Interestingly, patients in the group of “other” types of anaemia presented symptoms of iron deficiency. Side effects or oral iron supplements were also similar. (See Table below for detail.) 15.5% of patients required dose reduction or intravenous supplements. However, here was only little response in blood test results although subjective fatigue score improved.

Conclusion Iron supplements are well tolerated in patients with anaemia. Their use in patients with no evidence of iron deficiency however is of modest clinical benefit.

PWE-050 ESTABLISHING THE NORMAL FAECAL METABOLOME THROUGH ANALYSIS OF VOLATILE ORGANIC COMPOUNDS FROM HEALTHY ADULTS

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Introduction Volatile organic compounds (VOCs) are produced in the faeces through the action of the microbiome on gut contents. Specific changes in faecal VOCs are associated with disease such as colon cancer¹, IBS² and IBD³. Their role in health is not clearly defined. VOCs can be analysed using analytical techniques such as gas chromatography – mass spectroscopy (GC-MS). In order to interpret abnormal VOC profiles in disease states, we must have a better understanding of what is normal.

Method Data from 10 faecal VOC studies carried out in our lab, between 2015 and 2018, involving 91 healthy participants were amalgamated. All samples were collected and stored in the same conditions, samples were analysed by headspace GC-MS using our optimised protocol⁴. Spectral analysis was performed with Automated Mass Spectral Deconvolution and Identification System (AMDIS) and the National Institute of Standards and Technology (NIST). Further data processing was carried out using Metab in R, Microsoft Excel and Metaboanalyst.

Abstract PWE-050 Table 1 VOCs found in >90% of samples

(4R)-1-methyl-4-prop-1-en-2-ylcyclohexene

2-methylbutanal
2-methylbutanoic acid
3-methylbutanal
3-methylbutanoic acid
3-methylsulfanylpropanal
4-methylphenol
6-methylhept-5-en-2-one
Heptan-2-one
Nonan-2-one
Pentanoic acid
Phenol
Propanoic acid

Abstract PWE-049 Table 1

	Iron Deficiency Anaemia n 336		Other types of anaemia n 58	
Symptoms of iron deficiency	144 (43.0%)		33 (36.0%)	
Pallor n (%)	55 (16.5%)		15 (16.3%)	
Hair loss n (%)	10 (3.0%)		3 (3.3%)	
Ridges n (%)	5 (1.5%)		1 (1.1%)	
Glossitis n (%)	3 (0.9%)		1 (1.1%)	
Koilonychia n (%)	2 (0.6%)		1 (1.1%)	
Cheilosis n (%)				
Side effects on oral iron supplements	133 (66.8%)		43 (74.1%)	
Black stools n (%)	40 (20.0%)		15 (26.0%)	
Diarrhoea n (%)	41 (20.6%)		13 (22.4%)	
Constipation n (%)	40 (20.0%)		14 (24.0%)	
Pruritus n (%)	40 (20.0%)		9 (15.5%)	
Abdominal discomfort n (%)	22 (11.1%)		6 (10.3%)	
Nausea n (%)				
Improvement in fatigue Liskert scale (mean)	Baseline	At 3 months	Baseline	At 3 months
	48.2	61.4	50.0	58.6
Improvement in Haemoglobin (g/dL) Haemoglobin g/dL (mean)	Baseline	At 3 months	Baseline	At 3 months
	109.1	129.2	109.0	118.4

n (total number of patients), NS not significant