

should be conducted focussing on patients presenting to secondary care, to measure the true effect of Instagram influence.

#### PWE-66 COMORBID IRRITABLE BOWEL SYNDROME AND HYPERMOBILE EHLERS-DANLOS SYNDROME: A DISTINCT CLINICAL PHENOTYPE?

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**Introduction** Several studies have demonstrated a high prevalence of Functional Gastrointestinal Disorders (FGID), particularly irritable bowel syndrome (IBS) in patients with Hypermobile Ehlers-Danlos Syndrome (hEDS) and hypermobility spectrum disorders (HSD). However, no studies have identified if those with overlap IBS and hEDS/HSD form a distinct phenotypic profile to those with IBS alone.

**Methods** Case-Control study consisting of females with overlap IBS and hEDS/HSD and IBS alone. The overlap group consisted of females with an established diagnosis of hEDS/HSD referred to Neurogastroenterology clinics. Patients underwent telephone interviews assessing for IBS using ROME IV criteria. Those who met the criteria were included ( $n = 50$ ). IBS alone group consisted of females with an established diagnosis of IBS who had seen a hospital gastroenterologist. Patients underwent a video call to assess for the presence of IBS using ROME IV criteria and exclusion of hEDS/HSD using the Beighton scoring system ( $\leq 3$ ) and 5-point joint hypermobility questionnaire ( $< 1$ ) ( $n = 50$ ). Both groups were issued with the following questionnaires: Irritable Bowel Syndrome Symptom Severity, Gastrointestinal Symptom Rating Scale, Visceral Sensitivity Index Score (reverse scored to measure GI symptom specific anxiety), Patient Health Questionnaire Adjusted, Hospital Anxiety and Depression Scale, Quantitative measure of autonomic symptoms, and Health related Quality of Life.

Continuous variables were summarised by mean and standard deviation and analysed using an unpaired t-test; significance set at  $p < 0.05$ .

**Results** Patients with overlap IBS/hEDS had an increased IBS symptom severity (341.02 vs. 279.86;  $p = 0.001$ ), increased

non-GI related somatization scores (16.16 vs. 8.6;  $p = < 0.0001$ ), higher prevalence of autonomic symptoms in all domains (42.12 vs. 26.14;  $p = < 0.0001$ ), and worse quality of life (46.80 vs. 65.86;  $p = < 0.0001$ ) than those with IBS alone. However, patients with IBS alone had an higher visceral sensitivity index score than those with overlap IBS/hEDS (54.4 vs. 45.24;  $p = 0.004$ ). Whilst there were no significant differences in general anxiety disorder between the two groups ( $p = 0.126$ ), those with overlap IBS/hEDS demonstrated a trend towards increase in depressive symptoms (8.26 vs. 6.80;  $p = < 0.059$ ).

**Conclusions** These results suggest that the overlap hEDS/IBS cohort may be a distinct phenotype governed by marked autonomic symptoms, a lot of chronic pain and lower visceral sensitivity index. These patients are more complex and have more multimorbidity than those with IBS alone and may benefit from multidisciplinary treatment managing autonomic aspects as well as GI issues.

## Gastroenterology service

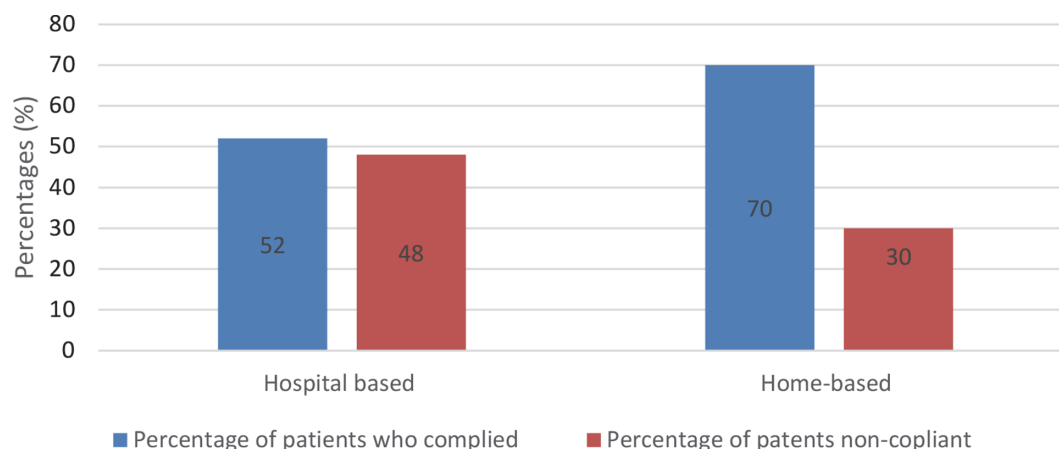
#### PTH-14 IBD PATIENT COMPLIANCE WITH FAECAL CALPROTECTIN HOME TESTING KITS COMPARED TO LABORATORY BASED HOSPITAL TESTING

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**Background** Faecal calprotectin (FC) testing has become a standard non-invasive tool to monitor disease control in Inflammatory Bowel Disease (IBD)(1). Reported patient compliance with submitting samples for hospital testing has been as low as 35% (2). We aimed to evaluate patient compliance with rapid home faecal calprotectin testing kits compared to hospital based testing in our university teaching hospital.

**Method** 100 patients with a diagnosis of IBD for at least 1 year and attended IBD clinic between January 2019 and August 2020 were selected. Our laboratory ceased performing FC testing in late March and we introduced home testing (BÜHLMANN IBD doc). 50 patients who were, pre-pandemic, requested to bring a stool sample to the laboratory for



**Abstract PTH-14 Figure 1** Comparison of percentage of compliance between hospital and home faecal calprotectin test request

hospital-based ELISA testing were randomly selected. We compared these to 50 random patients who had a home-based FC testing. Patients who were supplied with home testing kits received training from IBD nurses as well as on-line training materials. Data was collated retrospectively. Compliance was recorded if result was documented within 6 weeks of request.

**Result** Prior to the introduction of home testing, only 52% of the patients' sampled complied with hospital-based testing. This compared to a 70% compliance rate, when home testing was requested. (Figure 1)

**Conclusion** The improvement in FC testing compliance with rapid home testing kit compared to laboratory based testing illustrates the benefit of adapting home testing as the standard in future. The considerable increase in compliance by home testing may be due less disruption to patient's personal life i. e., ability to undergo testing at home, symptoms such as faecal incontinence preventing patients delivering samples to hospital and COVID pandemic compelling patients to stay at home. Adopting rapid FC home testing as standard provides patients with increased locus of control regarding their care, providing health care professionals with rapid results, thus, will improve management of IBD. The ability for patients to perform home test has obvious advantages during the COVID pandemic.

#### REFERENCES

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#### PTH-15 ECONOMIC ANALYSIS OF INTRAVENOUS IRON INFUSION IN IBD AND IDA: REAL WORLD DATA FROM UK

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**Introduction** Iron deficiency anemia (IDA) is a common symptom of inflammatory bowel disease (IBD), arising from the combined effects of gastrointestinal blood loss and reduced iron absorption. Intravenous (IV) iron is the preferred treatment option in patients with severe anaemia or in patients refractory to treatment with oral iron. Two high-dose, rapid-infusion IV iron formulations are currently available in the UK: ferric derisomaltose (FDI) and ferric carboxymaltose (FCM), differing in the nature of the carbohydrate with which the iron is complexed and the approved posology; FDI can be dosed up to 20 mg/kg bodyweight, while FCM can be dosed up to a maximum of 1,000 mg.

**Aims and Methods** The aim of the study was to evaluate the resource utilization and cost associated with treating IDA or hypoferritinemia with FDI versus FCM in patients with IBD in the United Kingdom (UK).

Data from 91 patients with IBD and either IDA or hypoferritinemia having received IV iron treatment at two UK gastroenterology services were pooled and analyzed using R. Of the included patients, 28 received FDI and 63 received FCM. Baseline age, bodyweight, hemoglobin, ferritin, and calculated iron need were compared between the FDI and FCM

treatment groups, and the total number of infusions administered to address the iron need was calculated. The average cost of treatment was then modeled using two approaches: healthcare resource group (HRG) tariffs from a national Department of Health (DoH) perspective and a microcosting analysis from the NHS Trust perspective. The HRG tariff approach utilized a weighted cost based on the 2019-20 tariff values for day cases and ordinary elective spells weighted by the combined day case and elective spell activity from 2018-19. The microcosting analysis captured observation and infusion time based on data from the summaries of product characteristics (SPCs) and the Personal Social Services Research Unit (PSSRU), costs of IV iron from the British National Formulary, and costs of giving sets, cannulas, and dressings from the NHS Business Services Authority and NHS Supply Chain.

**Result** None of the recorded baseline characteristics significantly differed between the FDI and FCM treatment groups ( $p > 0.05$  for baseline hemoglobin, ferritin, and bodyweight). Patients treated with FDI received an average of 1.14 infusions to address the iron need (32 infusions in 28 patients), compared with 1.56 infusions with FCM (98 infusions in 63 patients). The economic analysis based on HRG tariffs showed that this would result in savings of GBP 121 per patient (GBP 334 with FDI versus GBP 455 with FCM), while the microcosted analysis showed cost savings of GBP 23 per patient (GBP 220 with FDI versus GBP 243 with FCM) from the NHS Trust perspective.

**Conclusion** An analysis of real-world data from two gastroenterology services in the UK showed that using FDI in place of FCM would result in 0.42 fewer infusions per patient to treat either IDA or hypoferritinemia in patients with IBD. In the UK, this reduction would be associated with cost savings of GBP 121 per patient from the national DoH perspective or savings of GBP 23 per patient from an NHS Trust perspective. The reduction in infusions associated with FDI also has the potential to free up infusion suite capacity for other patients, or other IV infusions in the same patient group.

#### PTH-16 LIFE IN LOCKDOWN: SUPPORTED SELF-MANAGEMENT OF IBD INCREASES DISEASE CONTROL THROUGH MY IBD CARE

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**Introduction** MyIBD Care is a mobile phone application delivering digital therapeutics and remote monitoring for patients with inflammatory bowel disease (IBD). The app provides a library of self-management content, direct messaging with clinical teams, and a range of clinically validated disease-measures.

During the first wave of the COVID pandemic many IBD patients were forced to shield due active disease or medication. In response to this we developed situationally relevant behavioral science-based courses to alleviate the increased risk of patients developing anxiety or depression due to isolation. Our two courses focussed on maintaining healthy relationships and exercise. The courses were created using the same behavior-change framework as existing courses in the app.

**Methods** Fifteen MyIBD users participated in a study designed to evaluate the effectiveness of the 'Life in Lockdown'