Abstract O57 Table 1 Characteristics of SPS patients with positive genetic testing

Gene affected	Mutation	WHO SPS type	Age at diagnosis	Clinical outcome
RNF43	c.471 del G *Pathogenic variant*	II	68	Cascade genetic testing for at-risk relatives
MUTYH APC	c.1187G>A *Pathogenic variant* c.646-4T>G *Uncertain variant*	I	70	Cascade genetic testing for at-risk relatives
MUTYH	c.1187G>A *Pathogenic variant*	II	32	Cascade genetic testing for at-risk relatives
SMAD4	c.455-2A>G *Pathogenic variant*	I	78	Upper GI endoscopic surveillance, HHT screening and cascade genetic testing for at-risk relatives
POLD1	c.946G>A *Pathogenic variant*	1	70	Cascade genetic testing for at-risk relatives
CHEK2	c.1427C>T *Pathogenic variant*	I	34	Annual PSA testing and cascade genetic testing for at-risk relatives
CHEK2	c.1100delC *Pathogenic variant*	I	68	Moderate risk breast screening and cascade genetic testing for at-risk relatives
MSH6	c.1054G>A *Uncertain variant*	1	30	No change
MSH6	c.2398G>C *Uncertain variant*	I	59	No change
MSH6	c.3026A>T *Uncertain variant*	I	36	No change
MSH2	c.835C>G, *Uncertain variant*	I	37	No change
APC	c.3479C>A *Uncertain variant*	II	54	No change
APC	c.2486C>T *Uncertain variant*	1	38	No change
NTHL1	c.512C>T *Uncertain variant*	II	52	No change

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Neurogastroenterology

058 IS THE LOW FODMAP DIET EFFECTIVE IN THE LONG TERM? THE LARGEST MULTICENTRE PROSPECTIVE STUDY

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Introduction The low FODMAP diet (LFD) has been demonstrated to be effective in managing the symptoms of irritable bowel syndrome (IBS) in the short term. However, data remains limited on the long-term effects of this dietary therapy. The aim of this study was to assess the long-term effect of the LFD on symptom management and adherence.

Methods Patients with IBS who had received LFD advice between 2012–2019 were prospectively recruited at 7 centres in the United Kingdom. Participants were invited to complete dietary questionnaires assessing the LFD at long term follow up (>6 months). Symptoms were assessed using a modified gastrointestinal symptom rating scale (0, none; 1, mild; 2, moderate; 3, severe).

Results 589 patients were approached, with 154 participants completing the study (76% female, mean age 51±15 years). The mean duration of follow up following initiation of the LFD was 42±28 months. A statistically significant improvement in abdominal pain (2.3±0.8 vs 1.2±0.9, $p<0.001$), abdominal bloating/distention (2.3±0.8 vs 1.4±1.0, $p<0.001$) and bowel urgency (2.0±1.1 vs 1.3±1.0, $p<0.001$) was noted following the LFD at long term versus baseline. 78% (n=120) of individuals reported following an adapted LFD at long term follow up. 60% (n=92) reported grains (wheat, rye, barley) as a trigger for their symptoms, with 64% (n=98) purchasing gluten or wheat free products in the long term.

Conclusion This is the largest study demonstrating the efficacy of the LFD in the long term for individuals with IBS. Adherence to an adapted LFD appears to be good in the long term, with the majority of individuals reporting grains as a trigger and purchasing gluten or wheat free products to manage their symptoms.

059 MRI METHODS TO DEFINE COLONIC FUNCTION IN HEALTH AND CONSTIPATION

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Background RECLAIM is a multicentre study examining patients with functional constipation (FC) and IBS with constipation (IBS-C), along with healthy volunteers (HV) to correlate MRI findings with those from colonic manometry, and

Abstract O59 Table 1 Quantifying abnormal colonic function in constipation using MRI

MRI parameters					
Parameter		**HV**	**IBS-C**	**FC**	
Volume (mL)	Baseline	599±210	760±233	953±275*	p=0.01 ANOVA
	Maximum	998±315	1310±407*	1585±424*†	
Content mixing (%)	Baseline	23±10	17±9	20±4	p=0.4 ANOVA
	Maximum	38±11	31±7	29±7	
Transit Score		1.33±1.5	2.64±1.8*	2.57±1.24	p=0.006 ANOVA
Time to FIRST Bowel Movement (<150 min)		22/31 (71%)	8/23 (35%)	3/12 (25%)	p=0.002 Chi Square for trend

*p<0.05 vs HV, †p<0.05 vs IBS-C (Tukey's MC)

clinical response. We performed an interim analysis of MRI data collected so far to assess the colonic response to an osmotic laxative in patients with constipation and health.

Methods Participants recruited across two sites were classified as healthy volunteers (HV), constipation-predominant IBS (IBS-C) or functional constipation (FC) based on ROME IV criteria.

A fasting baseline scan was performed using a 3T Philips Ingenia scanner. Participants then consumed MoviPrep™ and had two further scans at 60 and 120 mins. MRI measures included: colonic volume, transit time (using the weighted-average position score 0–7 of transit markers taken the previous day; higher scores = slower transit) and a metric of mixing of colonic contents (% coefficient of variance in MRI data tagged to give sensitivity to movement, averaged over ascending colon region of interest). Image analysis was performed blind to participant condition.

Baseline and maximum value reached were used to allow for different oral-caecal transit and mid-study defaecation. Time from MoviPrep™ to first bowel movement (TBM) was recorded using a cut off at 150 min (average time spent at centre).

Results To date, 66 participants have completed MRI (31 HVs, age and gender matched to 23 IBS-C and 12 FC: results outlined in table 1). After MoviPrep™, largest volumes and increase from baseline was seen in the FC group compared to IBS-C and HV. Transit scores and TBM were variable but showed slower transit for the patient groups compared to HV. Whilst mixing decreased in patients compared to HV this was not significant.

Conclusion The MoviPrep™ challenge, as previously reported, demonstrates larger colons and slower transit in patients with constipation compared to health and could now be used to quantify abnormal function in clinical practice.

O60 ALTERED COLONIC NEUROINFLAMMATORY PROFILE IN IRRITABLE BOWEL SYNDROME WITH AND WITHOUT HYPERMOBILE EHLERS DANLOS SYNDROME

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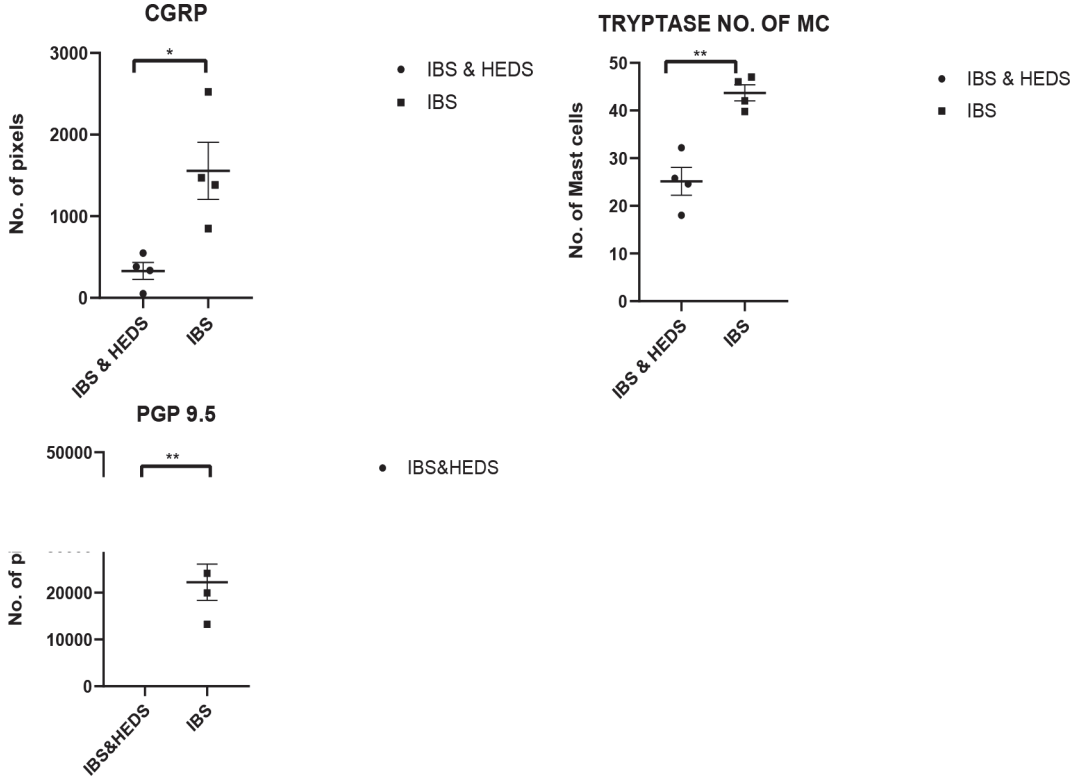

Abstract O60 Figure 1