

Abstract PWE-180 Table 1 Ability to make a diagnosis for each patient vignette

	IBS-C	IBS-D	IBD	CC
Type of physician	Experts / GEs / GPs	Experts / GEs / GPs	Experts / GEs / GPs	Experts / GEs / GPs
Correct diagnosis	88% / 56% / 31%	92% / 72% / 64%	92% / 87% / 85%	60% / 60% / 67%
Incorrect diagnosis	4% / 4% / 5%	8% / 12% / 14%	4% / 13% / 14%	40% / 40% / 32%
Don't know	8% / 40% / 64%	- / 16% / 22%	4% / - / 1%	- / - / 1%

Introduction The confident diagnosis of chronic abdominal conditions can be challenging. This study assessed the diagnostic process in irritable bowel syndrome with constipation (IBSC), irritable bowel syndrome with diarrhoea (IBSD), inflammatory bowel disease (IBD) and chronic constipation (CC).

Methods Online interviews were conducted with 25 experts, 100 gastroenterologists (GEs) and 104 general practitioners (GPs) from Germany, Spain, France, Italy and the United Kingdom to explore perception, attitude and diagnostic approach to IBS. Physicians were also presented patient vignettes describing a typical case of IBS-C, IBS-D, IBD and CC, respectively. For each vignette, participants were asked to make a diagnosis and to give details on further clinical investigations and management of each case.

Results The CC and IBS-C vignettes caused most diagnostic difficulties. For the IBS-C vignette, most GEs and GPs who did not make a correct diagnosis were unsure of the diagnosis. In contrast, most physicians who did not make a correct diagnosis for the CC vignette gave an incorrect diagnosis of IBS-C.

Physicians' confidence level in their diagnosis was 7.0/9 for the IBS-D vignette, 6.8/9 for IBS-C and 6.7/9 for CC. The score was lowest for IBD (6.3) as most physicians stated they would wait for the results of further investigations prior to diagnosis. Experts were most likely to endorse a positive approach to the diagnosis of IBS, IBD or CC, whereas GEs and GPs preferred to adopt a diagnosis by exclusion approach. For the IBS and CC vignettes, most physicians' next action would be to prescribe treatment. However, for the IBD vignette, the next action would be to conduct tests. Most experts (96%) and GEs (73%) claimed to have a good knowledge of the Rome III diagnostic criteria, compared to only 15% of GPs.

Conclusion The study highlights some of the difficulties experienced by GPs, GEs and experts in diagnosing chronic abdominal conditions. Physicians found differentiating between IBS-C and CC to be particularly challenging. Diagnostic criteria designed for research purposes may not necessarily be applicable in standard clinical practice.

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Disclosure of Interest V. Andresen Consultant for: Almirall, Astra Zeneca, Norgine, Shire, Conflict with: Almirall, Abbvie, Aptalis, Ardeypharm, Norgine, Shire, Mundipharma, Falk, P. Whorwell: None Declared, J. Fortea Employee of: Almirall S. A., J. Milce Grant/research support from: Almirall, Consultant for: Kantar Health.

PWE-181 QUANTITATIVE ASSESSMENT OF GLOBAL SMALL BOWEL MOTILITY IN CHRONIC INTESTINAL PSEUDO-OBSTRUCTION AND CONTROLS: A PRELIMINARY STUDY

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Introduction In this preliminary report, we present the initial results of a prospective investigation comparing MRI quantified global small bowel motility in healthy controls and patients with proven clinical and radiological Chronic Intestinal pseudo-obstruction (CIPO). Diagnosis is initially difficult and often delayed, many patients undergoing unnecessary surgical intervention prior to final diagnosis. MRI offers a potential non-invasive modality of diagnosis and monitoring, employing post-processing quantitation of global metrics describing small bowel motility¹.

Methods Subject selection: 11 healthy non-smoking volunteers (7 Male, mean age 33[22 to 48]) and 5 CIPO patients (3 Male, mean age 53[32 to 82]) were recruited. CIPO patients stopped any medications that influenced small bowel motility for one week prior to scan including opioids, anti-emetics and anti-diarrhoeals. Study overview: Participants underwent a single MRI motility scan before and immediately after an injection of 0.5 mg IV neostigmine, a cholinomimetic with potent prokinetic action. Statistics: Data normality was assessed using Shapiro-Wilk testing. 1) Baseline motility was compared in CIPO patients and controls. 2) Percent change in motility between baseline and post-neostigmine was compared between groups. Difference in means were tested using Welch's T-test.

Results

1. Mean baseline small bowel motility scores in CIPO patients was 0.19AU (range 0.1 to 0.25) and in controls 0.35AU (range 0.275 to 0.37) with a statistically significant difference of 0.17AU, P = 0.0026 (CI 0.09 to 0.23).
2. The mean percent increase in small bowel motility scores in CIPO patients following neostigmine was 29% (95% CI from 19 to 50%) and in controls 10% (range 0 to 34) with a statistically significant difference in groups response to neostigmine of 19%, P = 0.029 (95% CI from 4 to 40%).

Conclusion This study demonstrated significant differences in both resting and cholinomimetic-induced global motility between CIPO patients and healthy controls. Despite marked bowel distension in the CIPO patients, motility appeared present but reduced compared to controls, and responded to provocation with neostigmine suggesting the bowel still exhibits the expected pro-kinetic effects following pharmacological stimulation. With just five patients this is a preliminary study, nevertheless initial results appear promising and support our ongoing investigation program.

REFERENCE

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Disclosure of Interest None Declared.

PWE-182 DYSMOTILITY IN PARKINSON'S DISEASE CORRELATES TO GUT SYMPTOMS: FINDINGS OF A WIRELESS MOTILITY CAPSULE STUDY

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Introduction Parkinson's disease (PD) is a neuro-degenerative disorder with frequent involvement of the gut. Symptoms arise throughout the gastrointestinal tract through dysmotility secondary to autonomic and enteric nervous system involvement, as well from skeletal muscle involvement in the oropharynx and anorectum. It has been speculated that gut involvement may precede motor symptoms. The Wireless Motility Capsule (WMC) yields data on transit and motility throughout the gut. We report the first use of WMC to systematically assess motility in PD patients with and without gut symptoms, compared to controls.

Methods 15 patients with established PD completed the study: eight (2 f, mean age 70 [47–85]) had GI symptoms and seven (2 f, mean age 61 [49–77]) did not based on history and baseline scores on the Gastroparesis Cardinal Symptom Index (GCSI) and Wexner constipation score. Data comparison with seven controls (3f, mean age 52 [39–63]). Medications affecting GI motility /pH were discontinued for the study and the WMC was ingested following a standardised nutrient bar meal. Data on gastric emptying time (GET), small bowel transit time (SBTT), colonic transit time (CTT) and whole gut transit time (WGTT) were calculated.

Results PD patients with gut symptoms showed significantly slower transit in the stomach (GET 5.2 vs. 2.7 h, $p = 0.0003$), colon (CTT 57.8 vs. 27.4 h, $p = 0.02$) and overall gut (WGTT 67.2 vs. 34.7 h, $p = 0.02$) compared to asymptomatic patients. Small Bowel transit (mean SBTT 4.17 h) did not significantly differ. GET, SBTT, CTT and WGTT did not differ between asymptomatic PD and controls. There was a significant correlation between the Wexner constipation score and CTT in all patients ($p < 0.01$), but no correlation between GCSI and gastric emptying ($p > 0.05$).

Conclusion This study demonstrates that symptomatic PD patients have markedly delayed transit times throughout the whole gut compared to asymptomatic PD patients and controls. The correlation between scores and transit times suggest that WMC is a less useful indicator of gastric emptying than small bowel and colonic transit.

Disclosure of Interest None Declared.

PWE-183 PRELIMINARY SIGNIFICANT FINDINGS FROM A RANDOMISED CONTROL TRIAL OF POSTERIOR TIBIAL NERVE STIMULATION IN SYSTEMIC SCLEROSIS ASSOCIATED FAECAL INCONTINENCE

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Introduction The gastrointestinal tract is affected in up to 90% of Systemic Sclerosis (SSc) patients with faecal incontinence (FI) being reported in up to 38%. Passive faecal incontinence secondary to internal anal sphincter atrophy is the characteristic finding. We have shown that neuropathic changes are implicated in SSc patients with FI and sacral nerve stimulation has emerged as a potentially beneficial therapy in SSc. However this is expensive, invasive, not widely available and we have shown that medium term efficacy is poor. Posterior tibial nerve stimulation (PTNS) is a potential alternative to modulate the sacral plexus indirectly, with none of these disadvantages. This is the preliminary data on a randomised placebo controlled trial of PTNS versus sham PTNS to determine if nerve modulation is an effective treatment in SSc associated FI.

Methods We commenced a prospective randomised single-blind study of SSc patients with FI in February 2013 from a specialist Scleroderma unit. Baseline symptom scoring (bowel diary, Wexner), manometry and endoanal ultrasound were completed prior to randomization to PTNS or sham. PTNS was administered conventionally, by insertion of an acupuncture needle according to anatomical landmarks, connected to an electrical stimulator. Sham PTNS was administered in identical fashion but the PTNS surface electrode was not connected and instead separate TENS surface electrodes were connected to a TENS unit. Each patient underwent blinded intervention for 30 min periods, once a week for 12 weeks. The primary endpoints were the percentage reduction in faecal incontinence episodes and change in Wexner incontinence scores.

Results A total of 13 SSc patients (11 f), mean age 61 (36–72) completed the trial by October 2013. Of these 6 (5 f) underwent PTNS and 7 (6 f) patients underwent sham stimulation. All PTNS patients showed a reduction (5–100%) in the number of FI episodes in comparison to 0 sham patients at 12 weeks ($p < 0.01$ (CI: -81.49–14.34)). This matched an improvement in mean Wexner scores from baseline to treatment end (14.8 to 10.8 vs 13.4 to 13.6, true vs sham respectively, $p = 0.03$).

Conclusion This pilot data is demonstrating significant effects of PTNS in Scleroderma-associated FI. We present this significant initial data but anticipate having at least 25 completed patients by May 2014.

Disclosure of Interest None Declared.

PWE-184 THE EFFECT OF FIBRE ON CHRONIC CONSTIPATION IN ADULTS: A SYSTEMATIC REVIEW

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Introduction Symptoms of chronic constipation are common, with a prevalence of ~14% in adults worldwide. Although increasing fibre intake is universally accepted as a first-line treatment, patient dissatisfaction is common. A systematic review is thus required in order to evaluate the quality of scientific evidence behind this management approach. The aim was to assess the effect of fibre on chronic constipation and IBS-C in adults via a systematic review of randomised controlled trials (RCTs).

Methods Following Cochrane and PRISMA recommendations, references were identified by searching 5 electronic databases, hand-searching abstracts of 3 annual conferences, as well as scanning reference lists. Two reviewers independently assessed all studies identified, and performed data extraction and risk of bias assessment. Only RCTs reporting administration of fibre (carbohydrate polymers with ≥ 3 monomers that are not hydrolysed by endogenous enzymes in the small intestine) in adults with either chronic constipation or IBS-C were included.

Results Of 916 records identified, only 9 RCTs were eligible (495 patients). Fibre supplements, administered in the form of powder, granules, yoghurt or milk, were: psyllium ($n = 3$), galacto-oligosaccharides (GOS: $n = 2$), wheat bran ($n = 1$), inulin ($n = 1$), and mixtures of inulin/ resistant maltodextrin ($n = 1$), and inulin/partially hydrolysed guar gum ($n = 1$). Outcomes measured included stool frequency ($n = 9$), stool consistency ($n = 6$), stool weight ($n = 5$), faecal microbiota ($n = 3$) and