Conclusions Concomitant SIBO in patients with IBS-M confers a higher gastrointestinal and extra-gastrointestinal symptom burden. Moreover, it is associated with a reduction in quality of life. However, it was not associated with any demonstrable alterations in GI physiology. It is plausible to suggest that such IBS patients with co-existent SIBO may potentially preferentially respond to antimicrobial interventions such as rifaximin.

REFERENCES
3. Rami Sweis.

PWE-131
FODMAP INTAKE AND THE RISK OF IRRITABLE BOWEL SYNDROME IN THE COMMUNITY: A PROSPECTIVE STUDY

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Abstract PWE-130 Table 1

<table>
<thead>
<tr>
<th></th>
<th>SIBO positive (mean and standard deviation)</th>
<th>SIBO negative (mean and standard deviation)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastric emptying time (minutes)</td>
<td>237±233</td>
<td>208±205</td>
<td>0.7</td>
</tr>
<tr>
<td>Small bowel transit time (minutes)</td>
<td>316±104</td>
<td>361±127</td>
<td>0.3</td>
</tr>
<tr>
<td>Colonic transit time (minutes)</td>
<td>2050±1518</td>
<td>1357±1280</td>
<td>0.2</td>
</tr>
<tr>
<td>Whole gut transit time (minutes)</td>
<td>2670±1447</td>
<td>2561±1902</td>
<td>0.9</td>
</tr>
<tr>
<td>Ileal pH</td>
<td>7.8±0.2</td>
<td>7.8±0.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Colonic pH</td>
<td>7.3±0.5</td>
<td>7.4±0.8</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Introduction The cause of IBS is uncertain; however, food intolerance shares many features with this condition. Consumption of Fermentable Oligo-, Di- and Mono-saccharides And Polyols (FODMAPs) has been shown to induce IBS-type symptoms (Shepherd 2008) and clinical trials have shown that a low FODMAP diet can improve symptoms in this patient group (Halmos 2014). However, FODMAP intake is not higher in IBS than in health (Bohn 2013) and the outcome of low FODMAP diet may not be better than standard dietary advice in this condition (Bohn 2015). Previous research has shown that psychological factors are associated with increased symptoms in IBS patients (Zhu 2013, Van Oudenhoove 2016).

This population based study tests the hypothesis that high FODMAP intake increases the risk of IBS symptoms more in individuals with psychiatric disease and/or life event stress than in members of the community without risk factors for functional gastrointestinal disease.

Methods Subjects aged 16–74 were randomly selected from five South-Chinese communities. All subjects completed questionnaires by face-to-face inquiry with investigators including demographic information, gastrointestinal symptoms (Rome III), dietary intake (food frequency chart validated in Chinese community), psychiatric disease (HADS), life event stress (LES) and quality of life (SF-8). Results are presented as odds ratio with 95% confidence intervals.

Results From 1999/2115 (94.7%) members of the community that completed study questionnaires, 117 (5.9%) had IBS by Rome III criteria. The IBS group ingested less lactose than the ‘No-IBS’ group (p=0.024). Intake of other FODMAPs was similar in both groups (p=0.346). Compared to the ‘No-IBS’ group, subjects with IBS had a greater likelihood of depression (OR 1.5 (0.97–2.32); p>0.05), anxiety (2.84 (1.84–4.39), p<0.001), recent life event stress (1.5 (1.03–2.20); p>0.03) and medical or surgical co-morbidity (OR 2.90 (1.30–5.45), p<0.001). The IBS group also had lower quality of life (P<0.001).

Joint risk analysis identified high intake of total FODMAP intake as a risk factors for IBS only in subjects with psychiatric disease and/or life event stress (OR 2.3 (1.1–4.8), p<0.029). Similar effects were seen for individual symptoms, in particular bloating (OR 2.4 (1.3–4.6), p<0.008). Increased risk of IBS was identified with ingestion of high intake of individual FODMAPs (e.g. fructose, fructans, lactose) in combination with psychosocial factors, but not with sucrose (control) in any group.

Conclusions Overall FODMAP intake was similar in IBS and No-IBS groups in the community and FODMAP intake alone was not associated with abdominal symptoms. However, consistent with the study hypothesis, joint risk analysis demonstrates that high FODMAP intake does increase the risk of IBS symptoms in subjects with psychiatric disease and/or high levels of psychosocial stress, factors known to increase visceral sensitivity to digestive events. (ClinicalTrials: NCT01286597)

PWE-132
THERAPEUTIC OUTCOMES FOLLOWING ENDOTHERAPY FOR REFRACTORY GASTROPARESIS


Introduction The relative merits of endotherapy for refractory gastroparesis remain unclear. We assessed the symptomatic response of patients undergoing non-surgical pyloric intervention at a specialist tertiary centre.

Methods 57 patients (21 male, mean age 47, 16–81) with medical refractory gastroparesis (29 idiopathic, 5 diabetic, 23 post-gastric transposition) underwent 117 endoscopic treatments from Sep 2013-Sep 2017: either 100IU units of Botox injected into 4 quadrants of the pylorus (n=38). Patients with gastric malignancy, pyloric surgery or no pyloric injection were excluded. Symptoms were assessed immediately post-gastric transposition, at 15–20 mm (EBD, n=13) or combination therapy (n=38). Patients with gastric malignancy, pyloromyotomy or no follow-up were excluded. Symptoms were assessed immediately prior to each procedure and at first follow up using a retrospective scoring system based on the presence (1 point) or absence (0 points) of Vomiting, Nausea, Bloating or Early satiety. This formulated a composite symptom score (SS) out of 4; positive response was defined by improvement in SS of at least 1. Statistical analysis was performed using Wilcoxon Signed-Rank Test and Fischer’s Test.

Results There were no immediate or late complications. Mean symptom score (SS) improved per-patient from 2.1 points at baseline to 1.2 post initial endotherapy (p<0.01) at median follow up of 2.1 months. 20 patients required further...
endotherapy (median 2.5 treatments; range 2–12); mean SS was 1.0 at latest follow-up.

Per-procedure, mean reduction in SS was 0.8 points (p<0.01) with overall positive response rate of 67%. By symptom, vomiting was most responsive to endotherapy (86% pre vs 32% post). By treatment type, Botox alone (n=66) had the highest overall response (78%) compared to EBD (38%, p<0.02) or combination therapy (66%, p<0.3). Response to Botox was greater in patients under 40 (83% v 61%, p<0.04) and females (81% v 33%, p<0.002). By indication, diabetic GP(n=17) were most likely to respond (76%).

Sub-group analysis showed procedures for gastroparesis (diabetic/idiopathic, n=75) responded significantly more to Botox (mean SS reduction 1, p<0.01) than EBD (mean SS reduction 0.2, p>0.1) or combination therapy (mean SS reduction 0.44, p<0.012). Procedures for gastric transposition (n=42) showed significant SS reduction post combination therapy (2.1 v 1.2, p<0.01) but not post EBD (1.9 v 1.6, p>0.1) or Botox (1.7 v 1.1, p>0.08).

Conclusions Endotherapy is a safe and effective treatment for refractory gastroparesis. We found Botox monotherapy significantly improved symptoms in diabetic or idiopathic gastroparesis, especially younger females; conversely, combination therapy was preferable for delayed gastric emptying post gastric transposition. Careful patient selection may augment therapeutic response.

**PWE-133** IMPACT OF THE NORTH AMERICAN CONSENSUS ON HYDROGEN AND METHANE-BASED BREATH TESTING FOR CARBOHYDRATE MALABSORPTION

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Introduction The acquisition parameters and interpretation of breath testing data for the assessment of carbohydrate malabsorption (CM) varies widely between centres. The North American Consensus (NAC) document on breath testing published in 2017 was a first attempt to standardise this diagnostic test. Two key recommendations were to extend the period of post ingestion breath sampling from 120 to 180 min and to include a post-EBD breath test (as determined by a separate lactulose test) and a positive breath test for lactose at ≥560 min. Reductions in SS were not significant (p>0.05).

Conclusions Around 20% of the positive results for CM occurred after ≥120 min supporting the NAC position to extend the post ingestion period to 180 min to avoid false negative studies. SIBO may influence results and a lactulose breath test should be performed prior to CM testing to avoid false positive tests and to help interpret CM studies with greater accuracy. Like the first iteration of the Chicago Classification for oesophageal motility testing – the NAC on breath testing represents a positive first step in standardising these diagnostic tests.

**PWE-134** MANAGEMENT OF GASTROPARESIS: CURRENT PRACTICE IN A TERTIARY CENTRE

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Introduction Gastroparesis is a syndrome characterised by delayed gastric emptying in the absence of mechanical obstruction. The aim of this study was to assess consistency and adherence to guidelines of current practice and to evaluate the effectiveness of routinely implemented interventions in a large London tertiary centre.

Methods A retrospective study was conducted by examining records of all adult patients with delayed gastric emptying, objectively measured by NM scintigraphy, between 2010–2017. Effectiveness was defined as evidence of symptomatic improvement either semi-quantitatively by the Gastroparesis Cardinal Symptom Index (GCSI) or by documented qualitative evidence from clinical records, before and after intervention. Our practice was compared to recommendations published by the American College of Gastroenterology in 2013.

Results We identified 91 patients diagnosed with gastroparesis from 655 consecutive scans. Of these, 46 were excluded due to incomplete records. 55 patients were included: median age 48 (range 21–89), 67% female. Diabetes (40%) was the commonest cause; 40% of cases were idiopathic.

Conservative management 34/55 (62%) patients had dietary input with 16% requiring enteral nutrition. 17/55 (31%) of patients were taking a drug known to delay gastric emptying but stopped in only 12% of patients.

Medical management 48/55 (87%) patients received prokinetics, including metoclopramide 28/55 (51%), domperidone 33/55 (60%) and erythromycin 19/55 (35%) with treatment duration specified in only 30%. No patients had documented GCSI. From qualitative records, 7/14 (50%) of these reported some benefit, while 20/48 (42%) had no effect and in 21/48 (44%) the effect was unknown.

Intrapyloric Botox was administered in 25/55 (45%) of patients but results were not documented by GCSI. Nevertheless, 11/25 (44%) of patients reported some benefit. Additionally, 2 patients had pyloric dilatation and 1 feeding jejunostomy and venting gastrostomy.

Conclusions The management of gastroparesis showed wide variations in practice in our institution. The lack of semi-quantitative assessment of the results of different interventions hindered evaluation of effectiveness. Conservative measures, including discontinuation of contributing drugs, were adopted...
only in a minority of patients. Prokinetics are widely used as first choice approach but treatment duration and stopping rules were not clearly established. Intrapyloric Botox injection showed subjective benefit in a proportion of patients, matching results of previous RCTs where placebo had similar benefit. Our study indicates the need for a more consistent and evidence-based management of gastroparesis. Dedicated outpatient clinics and internal protocols may help to achieve this task.