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 v 32% post). By treatment type, Botox alone ($n\geq 66$) had the highest overall response (78%) compared to EBD (38%, $p\geq 0.02$) or combination therapy (66%, $p\geq 0.3$). Response to Botox was greater in patients under 40 (83% v 61%, $p\geq 0.04$) and females (81% v 33%, $p\geq 0.002$). By indication, diabetic GP ($n\geq 17$) were most likely to respond (76%).

Sub-group analysis showed procedures for gastroparesis (diabetic/idiopathic, $n\geq 75$) 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, $p\geq 0.12$). Procedures for gastric transposition ($n\geq 42$) showed significant SS reduction post combination therapy (2.1 v 1.2, $p\geq 0.01$) but not post EBD (1.9 v 1.6, $p>0.1$) or Botox (1.7 v 1.1, $p\geq 0.08$).

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 that SIBO should be excluded prior to CM testing. We retrospectively assessed our database of CM studies from the previous 12 months to examine the impact of these recommendations on results.

Methods Patient data was retrospectively attributed to 120 min and 180 min groups for both lactose and fructose breath tests. All patients provided a baseline sample prior to ingestion of 25 g of either substrate following a 24 hour restrictive diet and 12 hour fast. In total 200 breath tests were analysed (120-lactose and 80-fructose). A rise >20 ppm above baseline was considered positive for CM. The results were compared statistically using Pearson's chi-squared test.

Results A positive result for CM at 120 min was seen in 27 of 120 (22.5%) subjects for lactose and 33 of 80 (36.3%) subjects for fructose. When extended to 180 min the number of positive CM tests increased to 30% and 41.3% for lactose and fructose, respectively. Within these sub-groups the significant rise in gas levels occurred at ≤ 60 min after ingestion in 34.3% for lactose and 69.8% for fructose. There was a significant association between patients who had a positive SIBO

test (as determined by a separate lactulose test) and a positive breath test for lactose at ≤ 60 min [$\chi^2\geq 5.3$, $p0.02$]. Findings for fructose 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 GASTROPARSIS: 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 dietetic 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, 7/48 (15%) 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