difference in patients' sensory to rectal distension ($p=0.4527$), perception urge volume to defecate ($p=0.1499$) and the maximum rectal capacity ($p=0.2332$).

The anorectal electro-sensory were generally normal in both subtypes of FI and there was no statistical difference in the anal mucosal sensory ($p=0.088$) or rectal mucosal sensory ($p=0.4450$).

Conclusion This study showed that FI can be subtyped into I and II based on the distinctive pathophysiology findings. The subtyping of FI are likely to link the options for clinical management.

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PWE-087 OESOPHAGEAL BODY MOTILITY AND REFLUX PROFILES IN PATIENTS WITH OESOPHAGOGASTRIC JUNCTION OUTFLOW OBSTRUCTION

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Introduction Oesophagogastric junction outflow obstruction (OGJOO) has multifactorial aetiology that is closely ranking to achalasia in the Chicago classification [1] algorithm which take precedence to oesophageal body motility disorders. As a result, any coexisting oesophageal motility disorders is neglected.

In this study we assess the prevalence of the oesophageal body dysmotility and reflux disease in patients with OGJOO.

Method Patients were selected between November 2014 and December 2018 with OGJOO. The diagnosis was based on the high-resolution manometry testing (Sierra Scientific Instruments HRM system) and the Chicago Classification criteria [1].

The reflux monitoring was performed using Sandhill Scientific multichannel impedance-pH catheters (ZAN-BG-44). True reflux was accepted when retrograde impedance flow with concurrent oesophageal pH sensor detecting <4 . Assessment of reflux was made for oesophageal hypersensitivity, daytime & night time pathological reflux exposure and gastroesophageal reflux disease (GORD) (total exposure $>4.3\%$ & DeMeester score >14.72).

Appropriate Fisher exact test and t-test were performed.

Results Total patients selected is 202 (F:M=144:58, aged 1–9 years).

85/202 patients (42.1%) showed oesophageal body dysmotility disorders co-existing with OGJOO diagnosis. Of which, 70/85 patients had minor motility disorders (ineffective oesophageal motility 77.5%, fragmented peristalsis 22.5%) and 15/85 had major motility disorders (Jackhammer oesophagus 100%, distal oesophageal spasm 0%) ($p<0.0001$).

Reflux monitoring was performed on 145 patients with OGJOO. In 14/15 of the OGJOO patients asymptomatic to reflux symptoms did not have reflux disease whereas 45/130 of OGJOO reporting typical reflux symptoms (heartburn, chest pain & regurgitation) had reflux disease ($p=0.0206$). The odds OGJOO patients not having reflux disease when

asymptomatic is 7.41. In the 45 patients with pathological acid reflux exposure, 64.4% had daytime reflux disease, 22.2% nocturnal reflux disease and 13.3% of patients revealed oesophageal hypersensitivity. Moreover, 28/45 of these patients showed diagnostic compatibility with GORD. In 14/28 patients with OGJOO concurrent with GORD had abnormal motility whereas 68/82 OGJOO patients (without GORD) had normal oesophageal motility ($p=0.1258$). There also no statistical difference in the integrated relaxation pressure of the lower oesophageal sphincter in the OGJOO patients with and without GORD (19.0mmHg vs 20.4 mmHg, $p=0.1002$).

Conclusion The findings of this study revealed OGJOO disorder can co-exist with minor and major oesophageal body motility disorders in 42% of the cases and 30% of cases have reflux disease. These findings may impact on the options for managing the OGJOO.

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PWE-088 GORD MANAGEMENT – OESOPHAGOGASTRIC JUNCTION DILATATION?

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Introduction A group of patients with gastro-oesophageal reflux disease (GORD) also have oesophagogastric outflow obstruction (OGJOO) condition. Given the nature of the motility disorder, treatment of GORD in these patients would differ from GORD being caused by an incompetent GOJ. In this study we assess the GORD mechanism in patients with OGJOO.

Method Patients were screened between 2015 to 2018 with 24hr impedance-pH monitoring and high-resolution manometry (HRM) testing. Two groups of GORD patients were selected: patients also having OGJOO (group 1) and patients having normal oesophageal motility (group 2). The manometry assessment for OGJOO and normal motility was based on Chicago classification [1].

Results Total number of patients selected was 66: group 1 (F:M=21:7; age 4–0 years) and group 2 (F:M=27:11; 2–8 years).

Group 2 showed significantly higher acid reflux count (47.2 vs 32.1, $p=0.0036$) and a ratio of acid exposure time per acid reflux episode which significantly higher in group 1 (8.0 mins/episode vs 3.1 mins/episode, $p=0.0215$).

The total acid exposure between group 1 and group 2 was not significantly different (percent clearance time on pH was 10.2% vs 9.3% [$p=0.2372$] and acid exposure time was 139.24mins vs 121.10mins [$p=0.1536$]).

Conclusion There is indication that mechanism of GORD in OGJOO is mainly due to poor clearance of acid. Therefore, patients with GORD concurrent with OGJOO condition may benefit from improved oesophageal clearance, such as with OGJ dilatation opposed to antireflux surgery.

This study was limited by the sample size.