AB056. Feasibility and safety of gastric electrical stimulation in the management of medically refractory gastroparesis: a case series

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Background: Gastric electrical stimulation (GES) represents a rare but novel therapeutic modality for the management of medically refractory gastroparesis. The aim of this study was to describe the clinicopathologic and nutritional characteristics of a series of patients treated with GES.
Methods: Consecutive patients undergoing laparoscopic GES implantation (Medtronic Enterra™) from 2016–2019 were included. Clinical and pathologic data including aetiology, symptoms, investigations and nutritional status were recorded at serial pre and postoperative timepoints. Postoperatively, GES is titrated monthly according to clinical response using the Abell algorithm and symptom scores.
Results: Of over 20 gastroparetic patients evaluated, 5 patients who underwent GES were studied [3 (60%) female; 46.6±11.9 years]. Aetiology was diabetes in 60% and idiopathic (40%). One hundred percent had failed medical management. All underwent extensive preoperative GI tract function work-up including OGD, scintigraphic gastric emptying and gastrointestinal transit studies. Mean ± SD gastric emptying at 90 minutes was 14.8%±8.5% with a gastric emptying T1/2 of 253±79 minutes. All patients underwent uncomplicated laparoscopic GES implantation. Postoperatively, no significant change in weight (79.4±37.4 versus 79.2±35.7, P=0.948), BMI (27.1±11.4 *vs.* 26.9±10.5, P=0.877), or albumin (40.8±5.2 versus 42.8±3.0, P=0.518) was observed. Two patients (40%) required enteral or parenteral feeding preoperatively, with all patients maintained on oral diet after GES implantation (P=0.444).
Conclusions: The only Irish series to date demonstrates the feasibility and safety of GES for the management of medically refractory gastroparesis. In line with international series, it highlights the importance of detailed preoperative investigations and resource intensive ongoing postoperative management of patients selected for GES.
Keywords: Gastric electrical stimulation (GES); gastroparesis

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