Gastric Peroral Endoscopic Myotomy (G-POEM) for Gastroparesis: Predictors of Suboptimal Response

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INTRODUCTION
- Gastric Per Oral Endoscopic Myotomy (G-POEM) is a safe and effective procedure for reducing the symptoms of chronic gastroparesis.
- Historically, 30-40% of patients undergoing GPOEM have a suboptimal response.1,2,3
- We believe that identification of suboptimal responders is important to inform our decision making regarding GPOEM for gastroparesis.

METHOD
- The study was approved by Advocate Aurora Institutional Review Board.
- All patients presenting to us with gastroparesis were discussed in multidisciplinary meetings and all GPOEMs were performed by a single operator (MAQ).
- We performed a retrospective evaluation of a prospectively collected cohort of patients who underwent GPOEM at Aurora Medical Center Kenosha between January 2020 and September 2022.
- We first checked the validity of our results by comparing them to the published literature.
- We used two different definitions for suboptimal response: 1) Gastroparesis cardinal symptom index (GCSI) reduction of <1 point from baseline and 2) GCSI reduction of <25% from baseline.
- Univariable and multivariable logistic regression analyses were performed. A p<0.05 was considered statistically significant.

AIM
To identify the predictors of primary suboptimal response after GPOEM from our cohort of patients.

RESULTS
- Total of 62 patients underwent 64 GPOEMs during the study period from which complete information was available on 54 (87%) patients.
- GPOEM procedure was very safe with no complications or dumping syndrome.
- There was a strong correlation between reduction in GCSI and reduction in 4-hour solid phase gastric retention (Coefficient= 0.019, p=0.001).
- The overall clinical response seems to be stable over time as the number of secondary failures (initial response followed by loss of response) (12%) and delayed successes (initial non-response followed by response on subsequent follow-ups) (10%) were almost identical.
- The suboptimal response rates were 37% and 26% for GCSI<1 point reduction and GCSI<25% reduction, respectively. The rates of psychiatric co-morbidities (depression, bipolar disorders, and schizoaffective spectrum) were 75% and 79%, respectively in the suboptimal responders (using the aforementioned definitions) as compared to 41% and 45% in responders (p<0.05) (Table 2). This finding was significant on univariable analysis 4.28 (1.26-14.53) p=0.019 and 4.48 (1.08-18.54) p=0.038, respectively.
- Multivariable analysis including age, gender, body mass index, and psychiatric comorbidities revealed a strong trend towards suboptimal response in patients with psychiatric disorders; 3.49 (0.91-13.33) p=0.07 and 4.43 (0.94-20.93) p=0.06, respectively.

CONCLUSIONS
Presence of psychiatric co-morbidities may suggest a strong component of functional dyspepsia rather than gastroparesis, and therefore, such patients should be cautioned about the higher rates of suboptimal response to GPOEM for gastroparesis.

REFERENCES

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