Gastric Per-Oral Endoscopic Myotomy versus Pyloric Injection of Botulinum Toxin for the Treatment of Gastroparesis: Our Institutional Experience and a Review of the Literature

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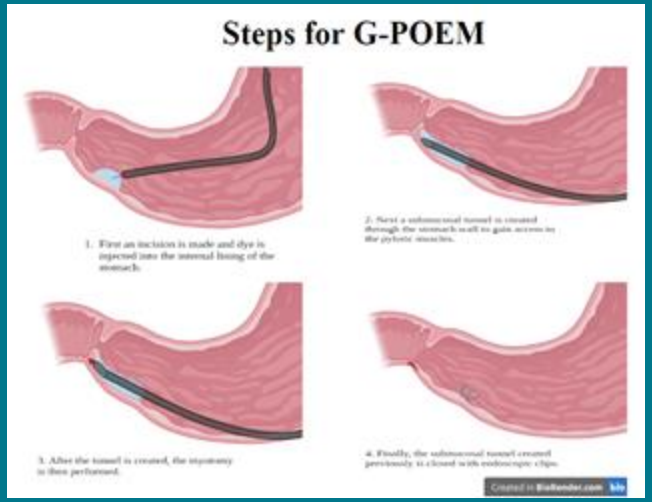
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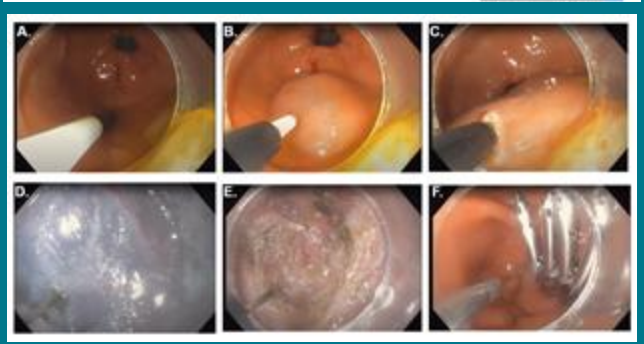
Introduction

- Gastroparesis is an increasingly prevalent condition that can impair quality of life
- Traditionally, a treatment option included pyloric injection of botulinum toxin
- However, recent guidelines now recommend against the use of botulinum toxin injections due to varying results and a high recurrence rate
- Gastric Per-Oral Endoscopic Myotomy (G-POEM) has become a promising treatment for patients with gastroparesis
- This study seeks to evaluate the efficacy of GPOEM and compare it to outcomes for botulinum toxin injections reported in the literature

Methods

- Patients who underwent a G-POEM between September 2018 and June 2022 at our institution were included.
- Changes in Gastric Emptying Scintigraphy (GES) studies and Gastroparesis Cardinal Symptom (GCSI) scores from the preoperative to postoperative period were compared
- A Pubmed literature review was conducted to identify all publications reporting botulinum toxin injections outcomes for the treatment of gastroparesis.

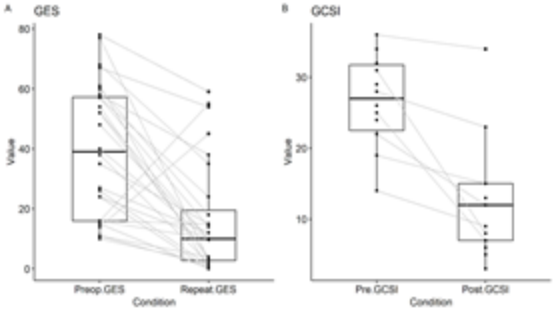




Results

- There was a significant reduction in GES% of (-23.5 ± 24.1, P<0.001) and GCSI scores (9.6 ± 8.0, p<0.02) following successful G-POEM
- In a literature review evaluating botulinum toxin injections, mean postoperative improvement in GES percentages and GCSI scores were reported at 12.1% and 6, respectively

Figure 1: Graphical Comparison of Outcomes



Conclusions

- G-POEM leads to significant improvement in GES percentages and GCSI scores postoperatively and is superior to the botulinum toxin results reported in the literature