

Short-term outcomes of Gastric per oral endoscopic pyloromyotomy (GPOEM) seven years ago and now

Shazia Rashid ^[1], Syed Musa Raza ^[1], Maryam Mubashir ^[1], Allison Derise ^[2], Grace McCurdy ^[2], Tonia Gooden ^[2], Pooja Shah ^[2], Philip Bouchette ^[2], Tunde Abubakar ^[2], Lovekirat Dhaliwal ^[2], Qiang Cai ^[1]
^[1]Department of Gastroenterology and hepatology, ^[2]Department of Internal Medicine

Introduction

- Gastric per oral endoscopic pyloromyotomy (GPOEM) has been performed in the last seven years or so.
- Many studies have shown that GPOEM is 80% effective in reducing nausea and vomiting in patients with refractory gastroparesis (Gp) with mean procedure time of about 1 hour.
- However, all reported outcomes of GPOEM were from the initial stages of the procedure being performed. In this study, we compare the short-term outcomes of our initial and recent 16 patients undergoing GPOEM.

Methods

- Our initial 16 patients who underwent GPOEM from 06/2015 to 07/2016 (Group A) and our recent 16 patients from 07/2021 to 01/2022 (Group B) were enrolled in the study.
- Patients' demographics, clinical outcomes of GPOEM and procedure time were compared between the two groups.
- Clinical success was defined as an improvement in the symptoms as measured by a decrease in mean GCSI and a significant decrease in at least 2 subsets of cardinal symptoms.
- The procedure time was defined as the duration from scope in and scope out. All procedures were performed by QC (who had performed a hundred POEM procedures before his first GPOEM).

	Group A	Group B
Sample size (n)	16	16
Mean age (yrs)	44.8 ± 14.8	47.8 ± 18.8
# of females	13	12
diabetes (# of pts)	9	8
idiopathic (# of pts)	5	4
post surgical (# of pts)	2	4
Gastric electrical stimulator (# of pts)	4	1
mean GCSI pre-GPOEM	3.40 ± 0.50	3.35 ± 0.70
mean GCSI post-GPOEM	1.48 ± 0.95 (p < 0.0001)	1.51 ± 0.82 (p < 0.0001)
mean procedure time (min)	49.7 ± 22.1	29.6 ± 10.1 (p < 0.01)
length of hospital (days)	2.47 ± 0.7	1.18 ± 0.4 (p < 0.0001)

Results

- The mean age for group A and group B were 44.8 ± 14.8 and 47.8 ± 18.8 years. Group A had 13 female pts, group B had 12.
- The number of diabetic, idiopathic and post surgical Gp were 9, 5, 2 for Group A and 8, 4 and 4 for Group B.
- All pts failed medical treatment. Four patients in Group A and one patient in Group B had gastric electrical stimulator.
- In Group A, 13 out of 16 pts (81%) had a significant improvement in the mean GCSI after GPOEM: 3.40 ± 0.50 before the procedure (n= 16) to 1.48 ± 0.95 (P < 0.0001) at 1 month (n= 16).

Results

- In Group B, 14 out of 16 pts (88%) had significant improvement in the mean GCSI after GPOEM: 3.35 ± 0.70 before the procedure (n=16) to 1.51 ± 0.82 (P < 0.0001) at 56 ± 22.6 days (n=15; one pt had no f/u).
- There were no significant differences between the two group in terms of pts demographics and short clinical outcomes.
- There was a significant difference in procedure time and the length of hospital stay (LOS) between the two groups. No adverse events were reported for both groups.

Discussion

- For an experienced submucosal endoscopist, there were no differences between the short term clinical outcomes of GPOEM between 7 years ago and now.
- However, the procedure time and the length of hospital stay were significantly shorter after 7 years of practice.

References

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