Outcomes after Pyloromyotomy Based on Gastroparesis Etiology

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Introduction

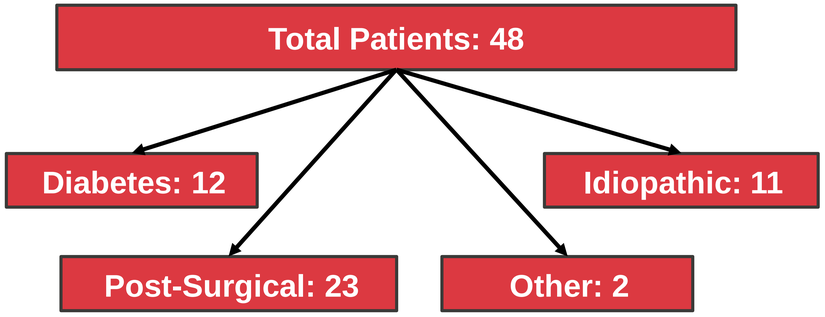
Per oral pyloromyotomy (POP) has been shown to improve symptoms and gastric emptying

Different Etiologies for Gastroparesis:
- Diabetes
- Post-surgical (secondary to vagal denervation)
- Idiopathic
- Other (narcotic-induced, etc.)

Aim: Compare outcomes after per oral pyloromyotomy based on the etiology of the gastroparesis

Methods

- Retrospective chart review 2018-2023
- Single tertiary care institution
- Statistical Analysis: Chi squared / Fisher's exact, Wilcoxon rank sum test



Results

Table 1. Comparison of demographics and preoperative treatments

	Total	Diabetes	Post-Surgical	Idiopathic	Other	p-value
	N=48	N=12	N=23	N=11	N=2	
Age	56.5 (44.5-69)	51.5 (40-63)	67 (51-74)	51 (40-57)	61.5 (56-67)	0.14
Sex	30 (63%)	8 (67%)	13 (57%)	7 (64%)	2 (100%)	0.84
BMI Over 30	20 (42%)	5 (42%)	6 (26%)	7 (64%)	2 (100%)	0.056
Smoker	8 (17%)	4 (33%)	0 (0%)	4 (40%)	0 (0%)	0.003
Charlson-Deyo Score						
0	6 (13%)	1 (8%)	4 (17%)	1 (9%)	0 (0%)	0.14
1 to 2	18 (38%)	6 (50%)	4 (17%)	7 (64%)	1 (50%)	
3+	24 (50%)	5 (42%)	15 (65%)	3 (27%)	1 (50%)	
Symptom Duration						
<1 year	18 (38%)	3 (27%)	11 (48%)	4 (36%)	0 (0%)	0.61
1-3 years	22 (47%)	7 (64%)	9 (39%)	5 (45%)	1 (50%)	
6+ years	7 (15%)	1 (9%)	3 (13%)	2 (18%)	1 (50%)	
Prior Endoscopic Intervention	21 (44%)	4 (33%)	13 (57%)	3 (27%)	1 (50%)	0.37
Prior Surgical Intervention	2 (4%)	0 (0%)	1 (4%)	1 (9%)	0 (0%)	0.76
Prior Medical Intervention	16 (33%)	5 (42%)	5 (22%)	5 (45%)	1 (50%)	0.33
Gastric Emptying at Hour 4	52 (33-68)	48.5 (28-59)	52 (40-80.5)	34 (32-60)	71 (59-83)	0.31

Results

Table 3. Comparison of outcomes after POP based on etiology

	Total	Diabetes	Post-Surgical	Idiopathic	Other	p-value
	N=48	N=12	N=23	N=11	N=2	
Postoperative Symptoms	0 (0-1)	.5 (0-2.5)	0 (0-1)	0 (0-1)	.5 (0-1)	0.37
Immediate Complication	1 (2%)	0 (0%)	0 (0%)	1 (9%)	0 (0%)	0.27
ED Visit	7 (15%)	0 (0%)	4 (17%)	3 (27%)	0 (0%)	0.3
Readmission	8 (17%)	0 (0%)	5 (22%)	3 (27%)	0 (0%)	0.24
Overall Complication	5 (10%)	1 (8%)	2 (9%)	2 (18%)	0 (0%)	0.76
Symptom Recurrence	15 (34%)	5 (45%)	8 (40%)	1 (9%)	1 (50%)	0.19
Time (months) to Recurrence	7 (1-12)	1 (1-7)	10 (4.5-30)	1 (1-1)	11 (11-11)	0.17
Repeat Medical Intervention	6 (13%)	4 (33%)	2 (9%)	0 (0%)	0 (0%)	0.11
Repeat Endoscopic Intervention	6 (13%)	1 (8%)	4 (17%)	0 (0%)	1 (50%)	0.18
Repeat Surgical Intervention	3 (6%)	1 (8%)	1 (4%)	1 (9%)	0 (0%)	1

Conclusion

There were no differences in postoperative complications or outcomes in patients undergoing POP for different etiologies
Although 34% of our patients had recurrence of one or more symptoms, very few needed further medical, endoscopic, or surgical therapy which reflects the overall improvement the patients experienced.
Treatment with POP was overall effective.
Our results indicate that patients with different etiologies of gastroparesis will similarly benefit from POP