University Hospitals

Challenging Chicago Classification 4.0 and EGJOO

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Background

- The Chicago Classification 4.0 updated the criteria for EGJOO to include manometry and clinically relevant symptoms with at least one of the supportive investigations (a timed barium esophagram or a functional lumen imaging probe).
- Our aim was to assess whether the updated definition of EGJOO applied in our clinical practice.

Methods

- Retrospective review was performed on 267 patients with high resolution manometry between 2017 to 2021.
- Data collected included demographics, symptomatology, manometric, endoscopic findings, preoperative upper gastrointestinal series (UGI) findings, interventions and follow up.
- EGJOO was diagnosed based on manometry in conjunction with detailed history, and findings on other studies.
- Successful intervention was defined as improvement in symptomatology after intervention.

Results

Forty one patients had the diagnosis of EGJOO. Thirteen patients were lost to follow up (31.7%). Out of the 28, 13 (36.6%) had EGJOO while 26 (64%) had concomitant esophageal pathologies. There were 7 males and 21 females with a mean age of 64.6 years and a mean BMI of 33.3. Of note, 5 (21.4%) patients had a prior foregut surgery. Esophagogastroduodenoscopy (EGD) findings were: normal (n=12), stricture /tight gastroesophageal junction (n=4), benign distal esophageal tumor (n=1), HH (n=6), barrett's (n=1), schatzki ring (n=2), and eosinophilic esophagitis (n=1). One patient did not have an EGD.

Results

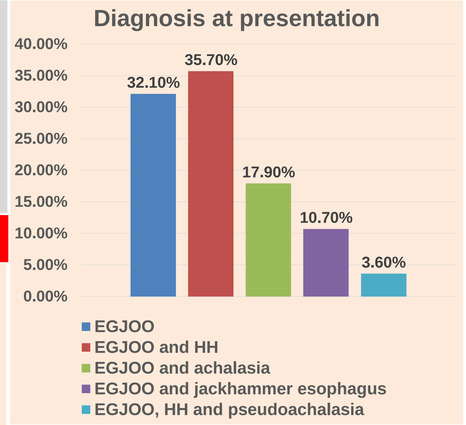
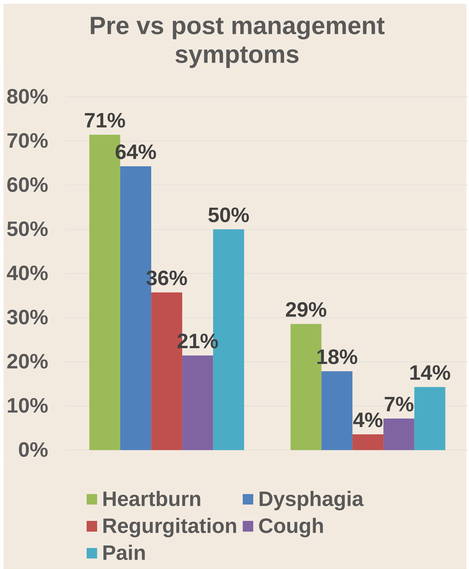


Table 1: Frequency of symptoms in correlation with UGI

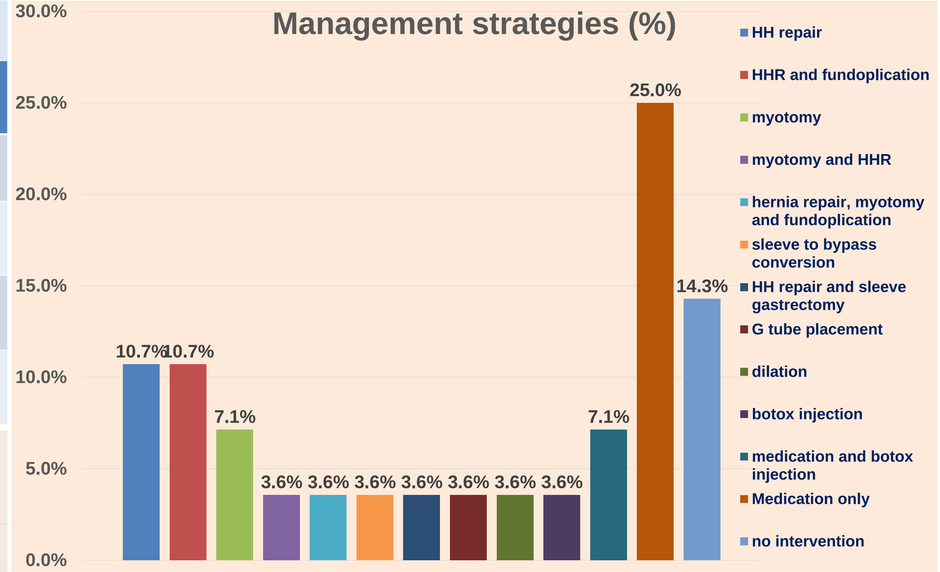
UGI findings	Heartburn (n=17)	Dysphagia (n=16)	Pain (n=12)	Regurgitation (n=10)	Cough (n=6)
Delay in contrast	2 (12%)	3 (19%)	1 (8%)	1 (10%)	1 (17%)
Decreased peristalsis	3 (18%)	4 (25%)	4 (33%)	2 (20%)	1 (17%)
Esophageal dilation	1 (6%)	2 (13%)	2 (17%)	1 (10%)	1 (17%)
Tertiary contractions	4 (24%)	7 (44%)	5 (42%)	5 (50%)	1 (17%)

Table 2: Correlation of EGJOO diagnosis with UGI findings

UGI findings	EGJOO (n=9)	EGJOO and HH (n=8)	EGJOO with possible achalasia (n=3)	EGJOO and Jackhammer (n=3)	EGJOO, HH and pseudoachalasia (n=1)
Delay in contrast	0	1 (13%)	2 (67%)	0	0
Decreased peristalsis	1 (11%)	0	0	2 (67%)	1 (100%)
Esophageal dilation	0	0	1 (33%)	0	1 (100%)
Tertiary contractions	4 (44%)	2 (25%)	3 (100%)	0	1 (100%)



Results



Symptom improvement occurred in 80% of patients who underwent HH repair, 94% myotomy, 42.9% balloon dilation, 53.8% botox injection, and 16.7% in medically managed patients.
Four patients did not have a pre-intervention UGI study.
Amongst the 15 patients who underwent surgical intervention, heartburn improved in 87.5% of the patients while all of them had improvement with dysphagia, regurgitation, cough and pain.

Conclusions

While UGI findings are helpful in diagnosing EGJOO, we found that the results are not always consistent with the symptomatology or diagnosis of EGJOO. We found that careful history and manometry with the aid of EGD findings can be sufficient in diagnosing EGJOO. Symptoms improved post-intervention in most of our cohort.

References

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