

In Esophagogastric Junction Outflow Obstruction, More Severe Lower Esophageal Sphincter Obstruction May be associated with a Greater Likelihood of Response to Botulinum Toxin Injection

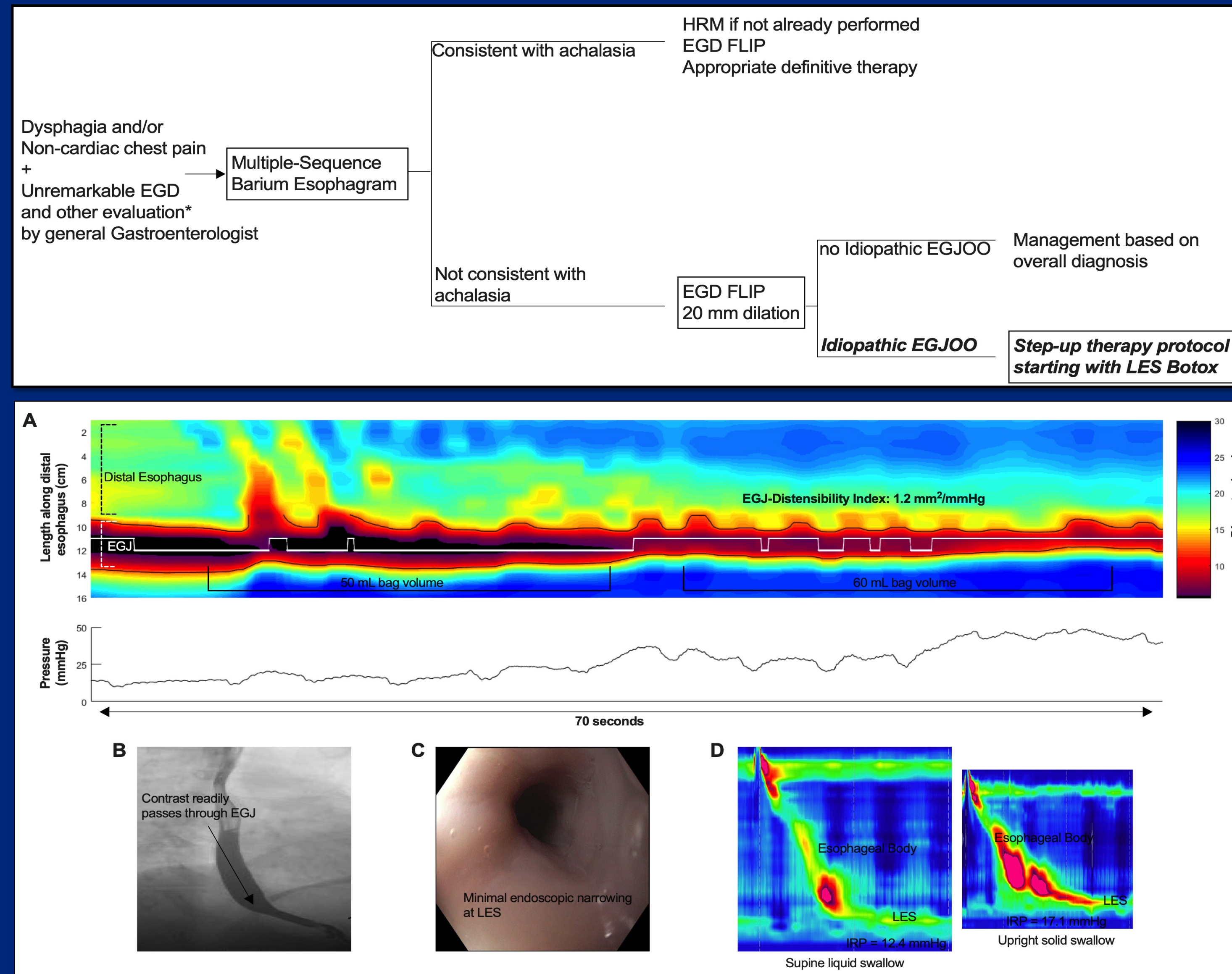
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Background

- We aimed to test whether lower esophageal sphincter (LES) physiological properties measured on high resolution manometry (HRM) and functional lumen imaging probe (FLIP) are different in patients with EGJOO based on the symptomatic improvement after Botulinum toxin (Botox)

Methods

- Single center prospective study over an 18-month period
- Symptomatic patients who were diagnosed with EGJOO per Chicago Classification 4.0 HRM criteria received Botox to the LES
- Patients reported the % improvement in symptoms 2 weeks after Botox injection.
- 70% or greater improvement in symptoms denotes responsiveness
- HRM metrics, FLIP indices and esophageal symptom questionnaires were compared between Botox responders vs. non-responders.



Results

- 43 patients (ages 32-87, 74% Female)
- Symptomatic response to Botox at 2 weeks occurred in 16 (37.2%) patients.
- There were no significant differences between HRM and FLIP metrics between botox responders and non-responders
- HRM supine integrated relaxation pressure (IRP) and upright IRP, and the FLIP distensibility index (DI) show a trend towards a higher degree of LES obstruction in the Botox-responsive group.

Table 1

Patient Characteristic	Botox responders (N = 16)	Botox non-responders (N = 27)	P value
Age [range]	65.3 [45-87]	55.5 [32-76]	0.01*
No. Female (%)	12 (75%)	21 (77.8%)	0.83
BMI (kg/m ²)	28.4 (7.9)	31.5 (8.2)	0.23
Narcotic use (%)	4 (25%)	4 (14.8%)	0.41
Supine IRP (mmHg)	25.1 (8.5)	22.2 (5.8)	0.2
Upright IRP (mmHg)	23.8 (15.8)	19.3 (7.5)	0.27
Basal LES (mmHg)	53.3 (18.9)	49.8 (22.9)	0.61
DL (s)	7.3 (2.0)	7.4 (1.6)	0.85
DCI (mmHg-s-cm)	3771.6 (2863.1)	3372.3 (4036.0)	0.73
FLIP EGJ DI (mm ² /mmHg)	0.83 (0.43)	1.4 (1.3)	0.11
BEDQ	15.3 (12.0)	19.8 (18.4)	0.42
GERDQ	8.1 (2.9)	9 (3.0)	0.41
Eckardt Score	4.9 (3.0)	4.1 (2.1)	0.28

Conclusions

EGJOO which responds to Botox therapy seems to demonstrate more severe obstructive physiology at the LES.