Ortner's Syndrome and Dysphagia Aortica: The Importance of a Comprehensive Swallow Evaluation

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Introduction

Ortner's Syndrome

- Hoarseness from the compression of the left recurrent laryngeal nerve (RLN) by enlarged cardiovascular structures.
- The left RLN is vulnerable due to its long intrathoracic course around the aortic arch.
- Compression may be due to mitral stenosis, left atrial enlargement, aortic aneurysm, pulmonary hypertension, aortic dissection, etc.
- Symptoms include hoarseness, dyspnea, dysphagia, chest pain, etc.

Dysphagia aortica

- Esophageal compression caused by a dilated or aneurysmal thoracic aorta, leading to dysphagia and odynophagia.
- Seen in many elderly patients.
- Can coexist with Ortner's syndrome if the same aortic pathology is leading to the compression of the left RLN and the esophagus.

Clinical Relevance

- Both conditions are rare but important differentials to consider for unexplained dysphagia, odynophagia, and hoarseness in patients with cardiovascular disease.

Case Presentation

A **90yoF** presented with **dysphonia diagnosed as vocal fold paralysis** secondary to an **aortic arch aneurysm.** She underwent injection medialization of the left vocal fold with improved glottic efficiency and voice quality. Despite this, she continued to complain of **persistent dysphagia, throat clearing, and chronic pharyngeal discomfort** over the following two years. Given the persistence of her symptoms in the setting of a known thoracic aneurysm, she was referred for further evaluation.

Workup & Intervention

Modified Barium Swallow Study (MBSS):

- Dynamic fluoroscopic imaging of oral, pharyngeal, and upper esophageal phases of swallowing.
- Performed to assess for oropharyngeal dysphagia and structural compression.

Esophageal Sweep

- Contrast swallow study evaluating the esophagus under fluoroscopy.
- Used to detect structural narrowing and external compression.

Cross-Sectional Imaging (CT)

- Confirmed presence of a thoracic aortic aneurysm with mass effect on the esophagus and the left RLN, and used for surveillance of the aneurysm.
- Correlated radiographic findings with clinical presentation of dysphagia and hoarseness.

Endovascular Repair

- The patient underwent thoracic endovascular aortic repair (TEVAR) due to aneurysm enlargement.
- Post procedure, the patient reported subjective improvement in swallowing, even though fluoroscopic studies remained stable.

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Figure 1. Esophageal sweep showed external compression of the mid-esophagus, consistent with her known aneurysm.

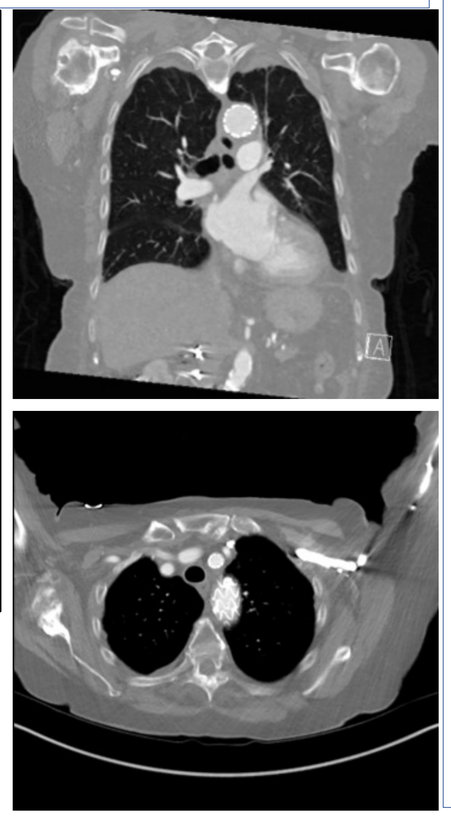

Figure 2. Computed Tomography (CT) showing stent placement endovascular repair of aortic aneurysm.

Discussion

- This case illustrates the rare **coexistence of Ortner's Syndrome** (vocal cord paralysis from aortic arch aneurysm) and **dysphagia aortica** (esophageal compression from an aneurysmal aorta).
- The patient initially **underwent injection medialization of the left vocal fold**, which improved **glottic efficiency and voice quality,** but her **persistent dysphagia and pharyngeal symptoms** prompted further investigation.
- **MBSS and esophageal sweep** confirmed **external esophageal compression**, while aneurysm surveillance imaging demonstrated **progressive enlargement**, supporting the diagnosis of dysphagia aortica.
- She ultimately underwent **TEVAR** with **subjective improvement in swallowing symptoms,** despite stable fluoroscopic imaging. This highlights the importance of **clinical correlation**, as symptomatic relief may be present even without radiographic change.
- Her presentation underscores the need for **multidisciplinary collaboration** among otolaryngology and cardiovascular services to accurately diagnose and manage complex cases.
- Previous studies have linked dysphagia aortica to poor outcomes and high mortality if untreated, reinforcing the **value of early recognition and intervention**.
- Further research is warranted to clarify the role of TEVAR in symptom relief, particularly in **elderly patients**, in addition to establishing protocols for early detection of aneurysm-related swallowing symptoms.

References

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