

Clinical Image

Dysphagia Even for Barium Swallow, What's Next?

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DOI: <https://doi.org/10.3329/jom.v21i2.50221>

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Received: 3 June, 2019

Accepted: 15 May 2020

Case Summary:

A 75-year-old edentulous man presented with dysphagia to solid and fluid for 3 weeks. He had no problem in initiating swallowing, but the food stuck in the lower part of the neck, causing him to regurgitate back. There was associated globus sensation in throat. He claimed to have good appetite. There was no history of pain on swallowing, choking sensation,

hoarseness of voice, any aspiration symptom or shortness of breath. He denied any history of fever. He had loss some weight. Neck examination revealed a small midline mass which moved with deglutition and tongue protrusion (Panel 1). Larynx was normal, except pooling of saliva in the pyriform fossa. Lateral neck radiograph was obtained (Panel 2).



Fig.- 1: Midline mass in front of neck (Panel 1) and Lateral neck radiograph (Panel 2).

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Questions:

1. Interpret the radiograph.
2. Where is the possible lesion?
3. State the required investigations.

Answers:

1. Lateral neck radiograph shows normal cervical lordosis. The airway is patent. There is no radio-opaque foreign body that may contribute to the globus sensation. There is trapped air in the esophagus, starting from the level of 7th cervical vertebra downwards. Air trapping without any abnormal opacity still can suggest foreign body ingestion, especially if the symptom developed acutely, and it indicates complete obstruction. Common radiolucent foreign bodies that can mimic similar symptom include denture plates and food bolus.^{1,2}
2. Some shadowing of soft tissue lesion is seen in the proximal part of the trapped air. Anatomically it corresponds with the hypopharynx or cervical esophagus. The possible diagnosis is upper esophageal carcinoma. This is supported by evidence of pooling of saliva during laryngoscopic examination, secondary to inability to swallow even fluid. The next differential diagnosis is post-cricoid carcinoma, a subset of hypopharyngeal carcinoma. However, it is usually accompanied by some pharyngo laryngeal symptoms such as sore throat, odynophagia or hoarseness due to vocal cord immobility.³ The symptom of immediate regurgitation of undigested food supports the lesion is in the upper part of the esophagus. One of them is Zenker diverticulum. It is an out-pouching of lower pharynx (from a dehiscence in inferior constrictor muscles) which

accumulates food particles to form a swelling. This lesion can manifest as lateral neck swelling, or compressive symptoms such as dysphagia. The mid line lesion in this patient, is the thyroglossal duct cyst, which is unrelated to the presenting symptoms.

3. As there is complete obstruction including fluid, and laryngoscopy showed normal larynx and hypopharynx, Barium swallow may not be as useful as it is thought because the patient can't even swallow his saliva, so as the contrast fluid. Furthermore the symptom is already ongoing for 3 weeks, in an elderly, dehydration is immediate catastrophic sequelae. This patient should undergo urgent esophagogastrosocopy. It can insufflate the collapsed esophagus and any mucosal lesion can be better visualized. Any mass identified on the initial Barium swallow, if had been done, would eventually require esophagogastrosocopy for biopsy.⁴ Esophageal manometry and pH study may be needed if motor dysfunction or reflux disease are considered.

Conflict of interest: None.

References:

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