

A Case Of Esophageal Cancer Found On Video Fluoroscopic Swallowing Study

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BACKGROUND

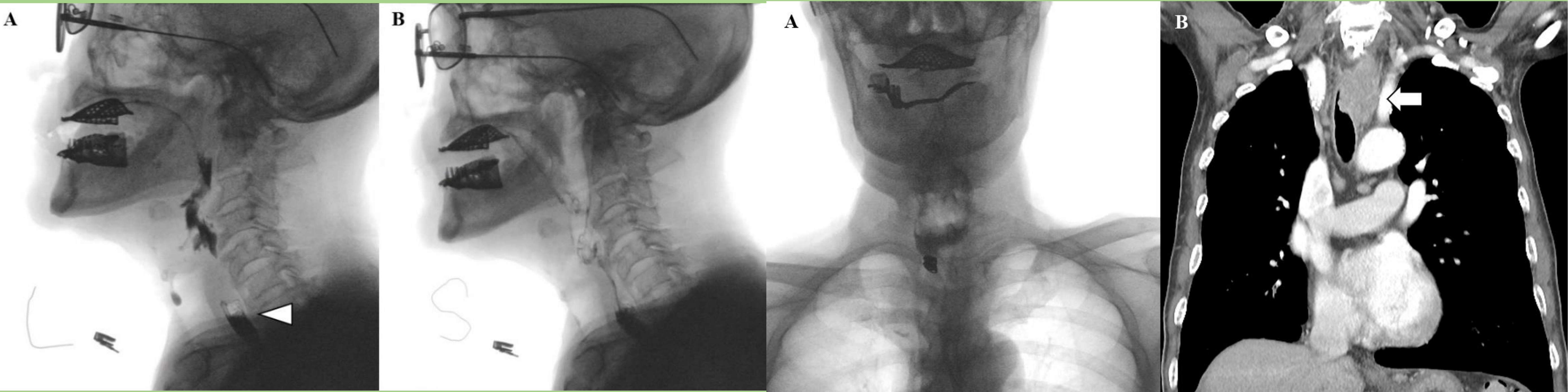
Dysphagia is common and can present with various symptoms depending on the location and underlying mechanism. Patients with oropharyngeal dysphagia may have trouble in initiating swallowing or symptoms such as coughing and aspiration, whereas those with esophageal dysphagia may complain of a sensation of food sticking in the throat after swallowing. Esophageal dysphagia is primarily caused by functional disorders such as GERD but can also occur rarely due to esophageal cancer. We present a case of esophageal cancer incidentally found on video fluoroscopic swallowing study (VFSS).

CASE REPORT

A 75-year-old male with underlying conditions of alcoholic dementia, DM, and hypertension presented to our hospital with complaints of swallowing difficulty and aspiration symptom since April 2023. He primarily complained of difficulty during swallowing solids, while subjectively denying symptom with liquid intake. For dysphagia evaluation, VFSS was performed on October 16, 2023. The examination revealed impaired epiglottic folding and incomplete laryngeal closure, resulting in silent aspiration (PAS 8) observed with both liquid and solid consistencies. On lateral view, above severe dysphagia findings were observed, along with an air-fluid level at the C6-7 spine level during the esophageal phase (Figure 1-A). During the examination with solid consistency, there was an increase in the amount of bolus retention and duration of bolus passage. Additionally, some of the retained bolus was observed to regurgitate upwards through the UES opening (Figure 1-B). Further evaluation was performed with an anterior-posterior (AP) view, revealing prominent narrowing and filling defect in the upper esophagus (Figure 2-A). For further evaluation, a contrast-enhanced chest CT (Figure 2-B) was conducted, revealing an irregular mass measuring 3.4 x 4.9 cm in size with invasion into the trachea at the upper esophagus. Following collaborative evaluation by the gastroenterology department, EGD was performed, revealing an ulcerative and fungating mass located 15 cm from the upper incisor. Biopsy of this mass confirmed the diagnosis of squamous cell carcinoma. The patient was subsequently admitted to the oncology department and underwent CCRT. Additionally, PEG insertion was performed for adequate nutritional support during treatment, considering the cancerous condition and severe dysphagia findings observed on the VFSS.

Figure 1. Patient’s VFSS image demonstrates an air-fluid level (White triangle) on liquid consistency (A) Patient’s VFSS image demonstrates increased bolus retention which regurgitates above UES opening on solid consistency (B)

Figure 2. Patient’s VFSS image on AP view demonstrates prominent narrowing and filling defect in the upper esophagus (A) 3.4 x 4.9 cm sized esophageal mass (White arrow) with invasion into trachea on contrast-enhanced chest CT (B)



CONCLUSION

Dysphagia can arise from a variety of causes, and though structural causes like head and neck or esophageal cancers are rare, they can lead to dysphagia. In this case, VFSS revealed swallowing dysfunction during the esophageal phase, with particular significance noted on the AP view for early detection of structural abnormalities. Routinely examining the AP view during VFSS plays a crucial role not only in identifying functional abnormalities such as impaired motility or reflux but also in detecting structural problems such as cancer.