

AMSER Case of the Month:

92 year old female with difficulty swallowing



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Patient Presentation

- CC/HPI: 92 year old female presents with increasing trouble swallowing and a feeling of a lump in the throat
- Past medical history: hiatal hernia, upper respiratory tract fungal infection
- Past Surgical hx: noncontributory

Differential

- Peptic stricture
- Scleroderma
- Achalasia
- Diffuse esophageal spasm
- Diverticulum

What Imaging Should We Order?

Select the applicable ACR Appropriateness Criteria

Clinical Condition: Dysphagia

Variant 1: Oropharyngeal dysphagia with an attributable cause.

Radiologic Procedure	Rating	Comments	RRL*
X-ray barium swallow modified	8		☼ ☼ ☼
X-ray pharynx dynamic and static imaging	6		☼ ☼ ☼
X-ray biphasic esophagram	4	Perform this procedure with double contrast and single contrast.	☼ ☼ ☼
X-ray barium swallow single contrast	4		☼ ☼ ☼
Tc-99m transit scintigraphy esophagus	2		☼ ☼ ☼
Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level

Variant 2: Unexplained oropharyngeal dysphagia.

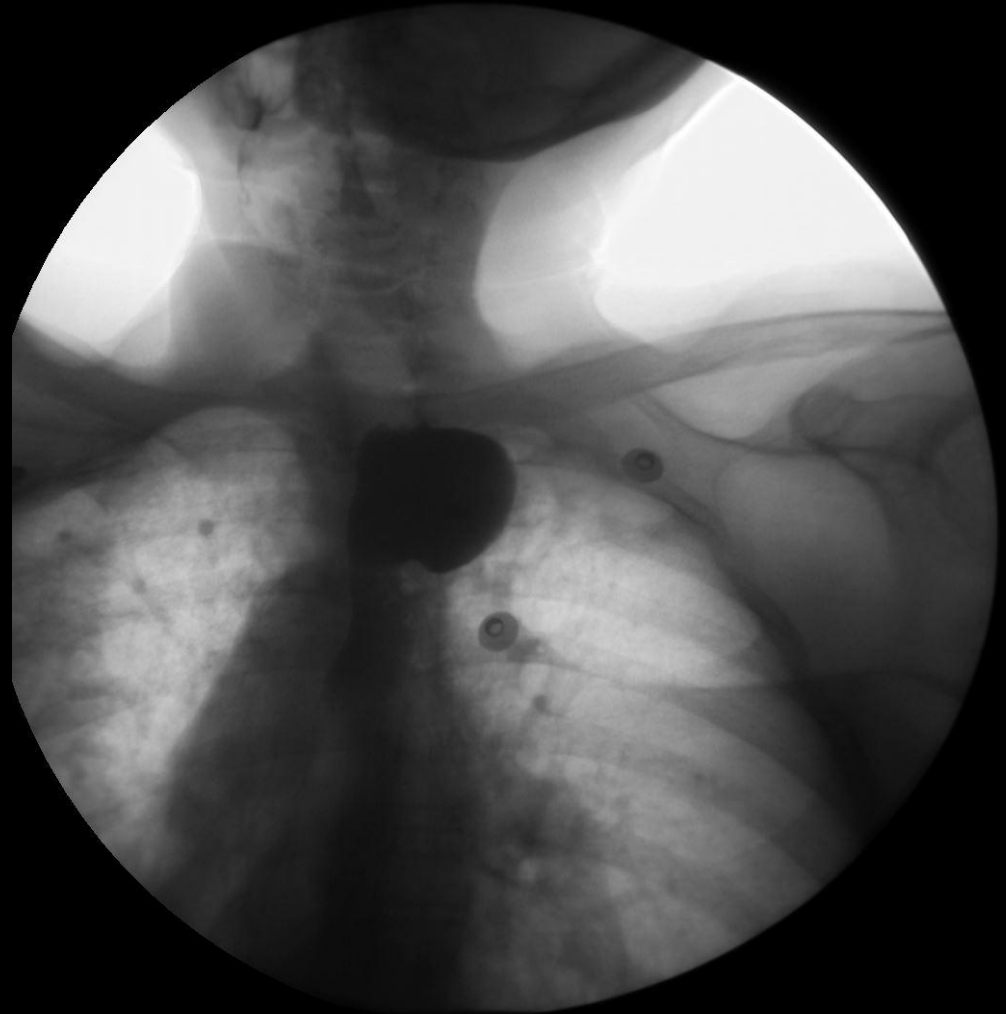
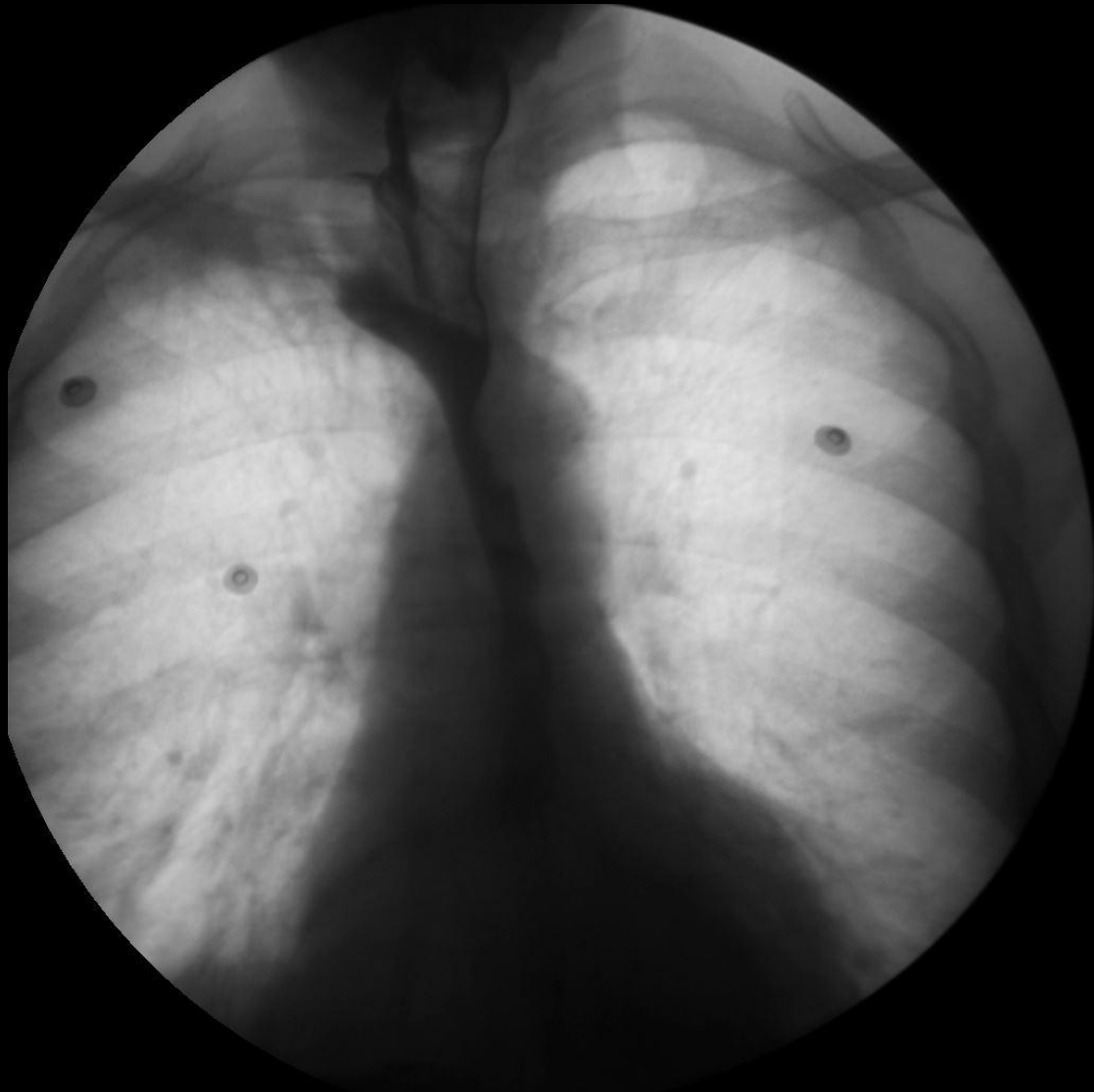
Radiologic Procedure	Rating	Comments	RRL*
X-ray pharynx dynamic and static imaging	8	In this procedure both pharyngeal and esophageal examinations are needed since the patient may have referred dysphagia.	☼ ☼ ☼
X-ray biphasic esophagram	8	In this procedure both pharyngeal and esophageal examinations are needed since the patient may have referred dysphagia. Perform this procedure with double contrast and single contrast.	☼ ☼ ☼
X-ray barium swallow modified	6		☼ ☼ ☼
X-ray barium swallow single contrast	6		☼ ☼ ☼
Tc-99m transit scintigraphy esophagus	4		☼ ☼ ☼
Rating Scale: 1,2,3 Usually not appropriate; 4,5,6 May be appropriate; 7,8,9 Usually appropriate			*Relative Radiation Level



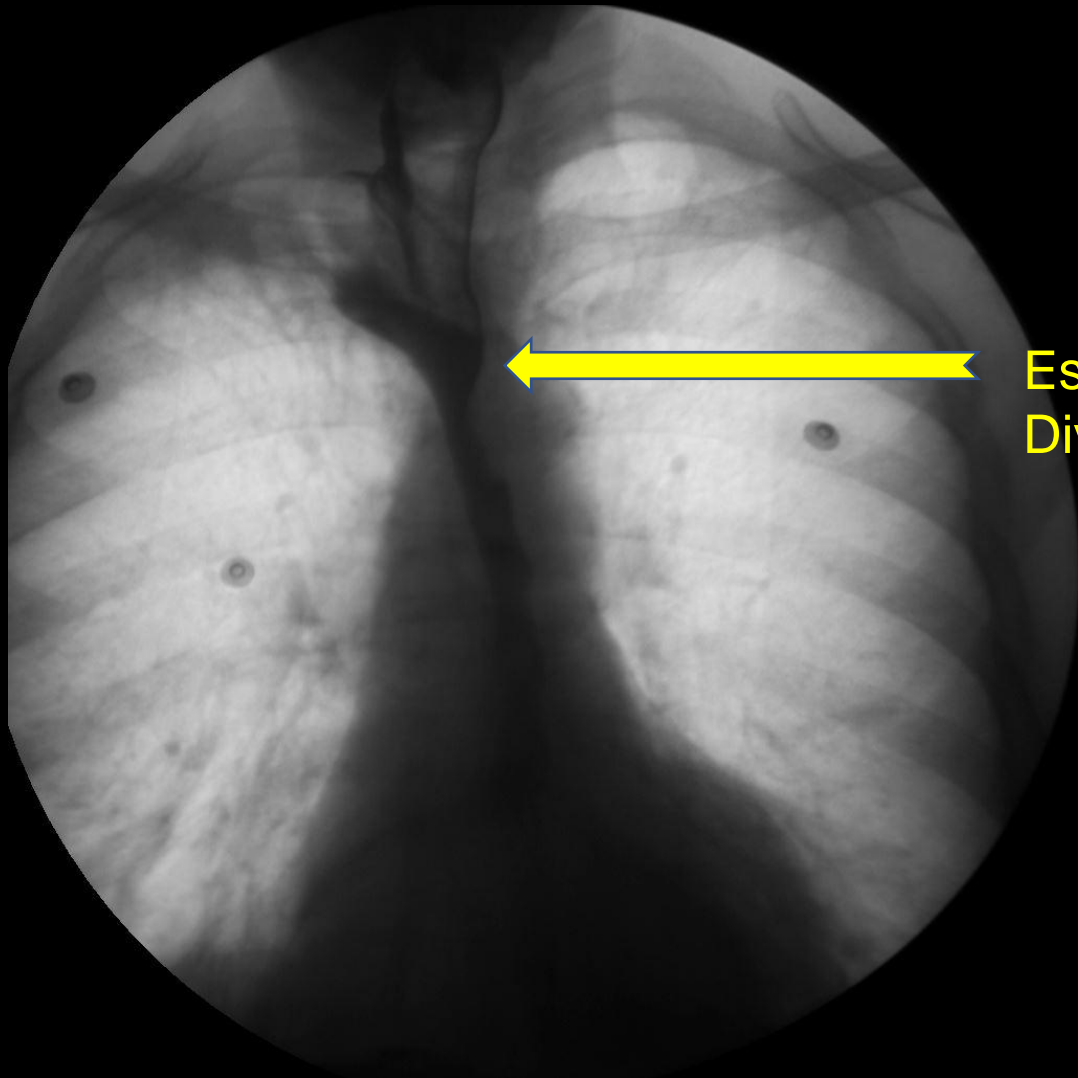
This imaging modality was ordered by the physician



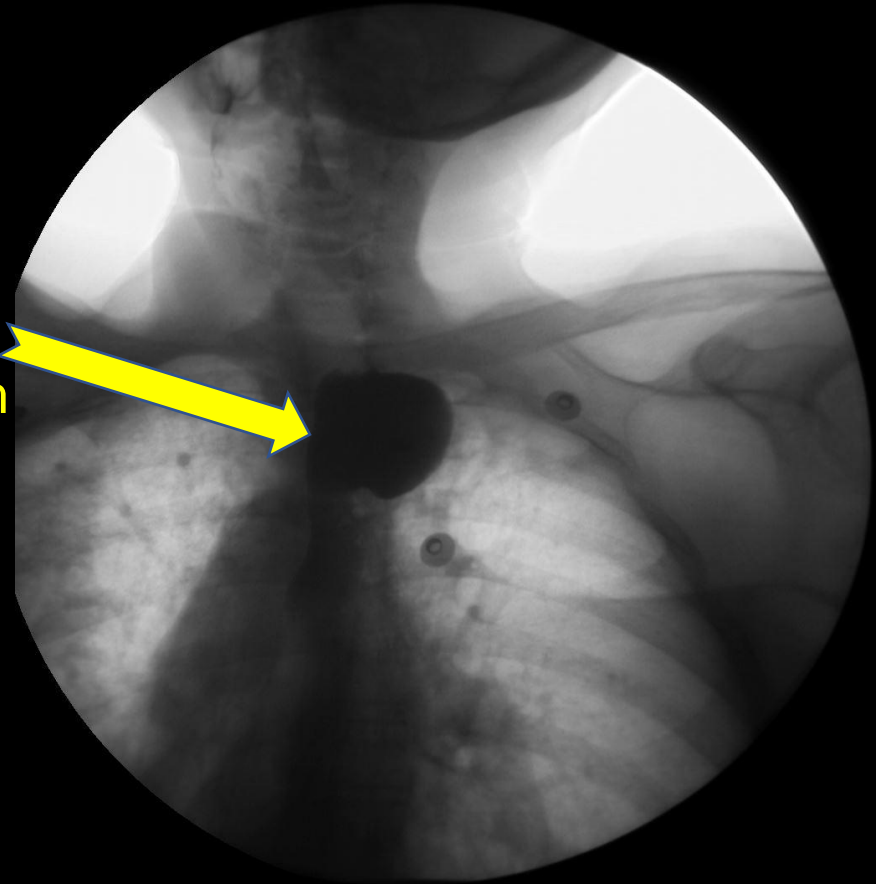
Findings (unlabeled)



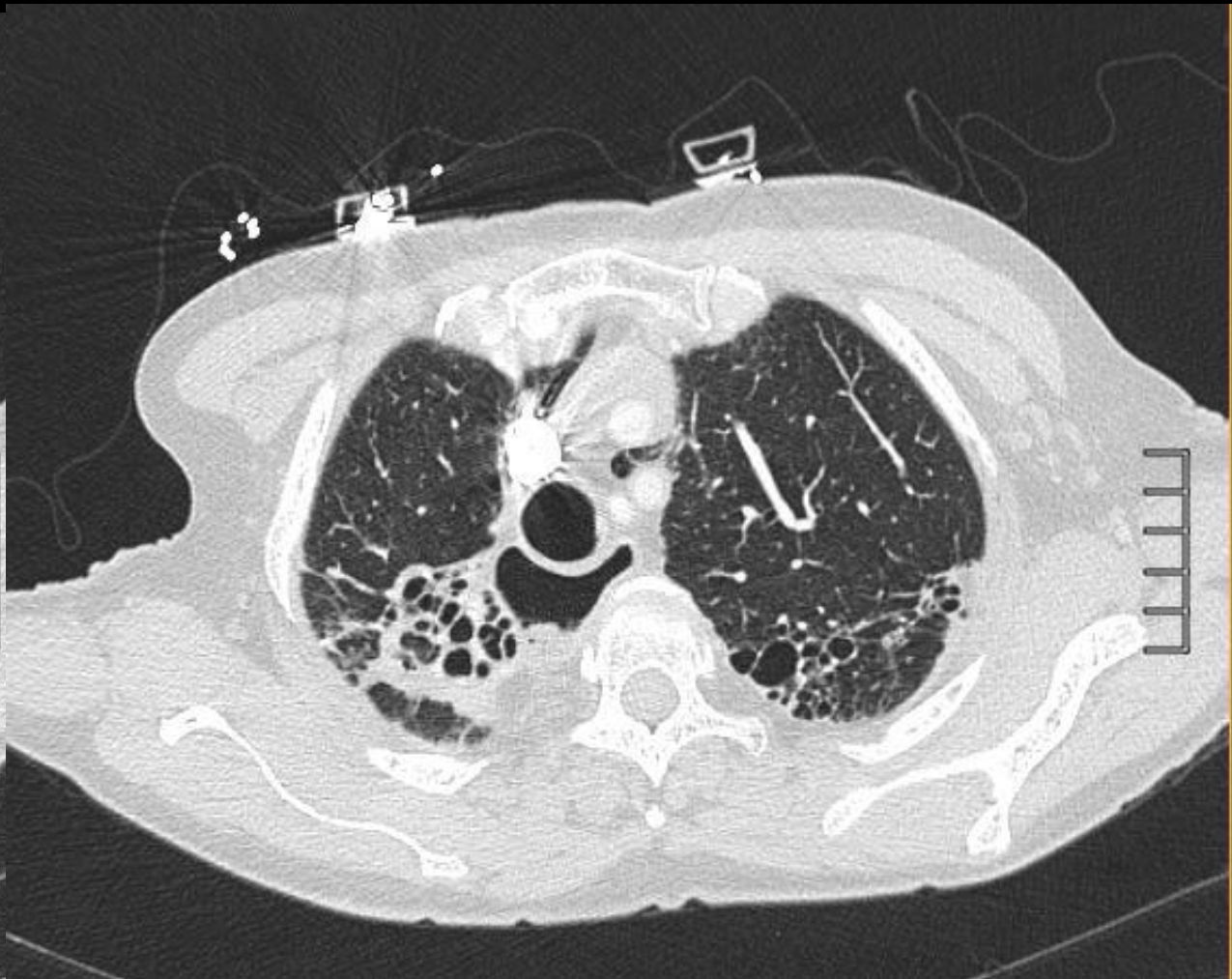
Findings: (labeled)



Esophageal
Diverticulum

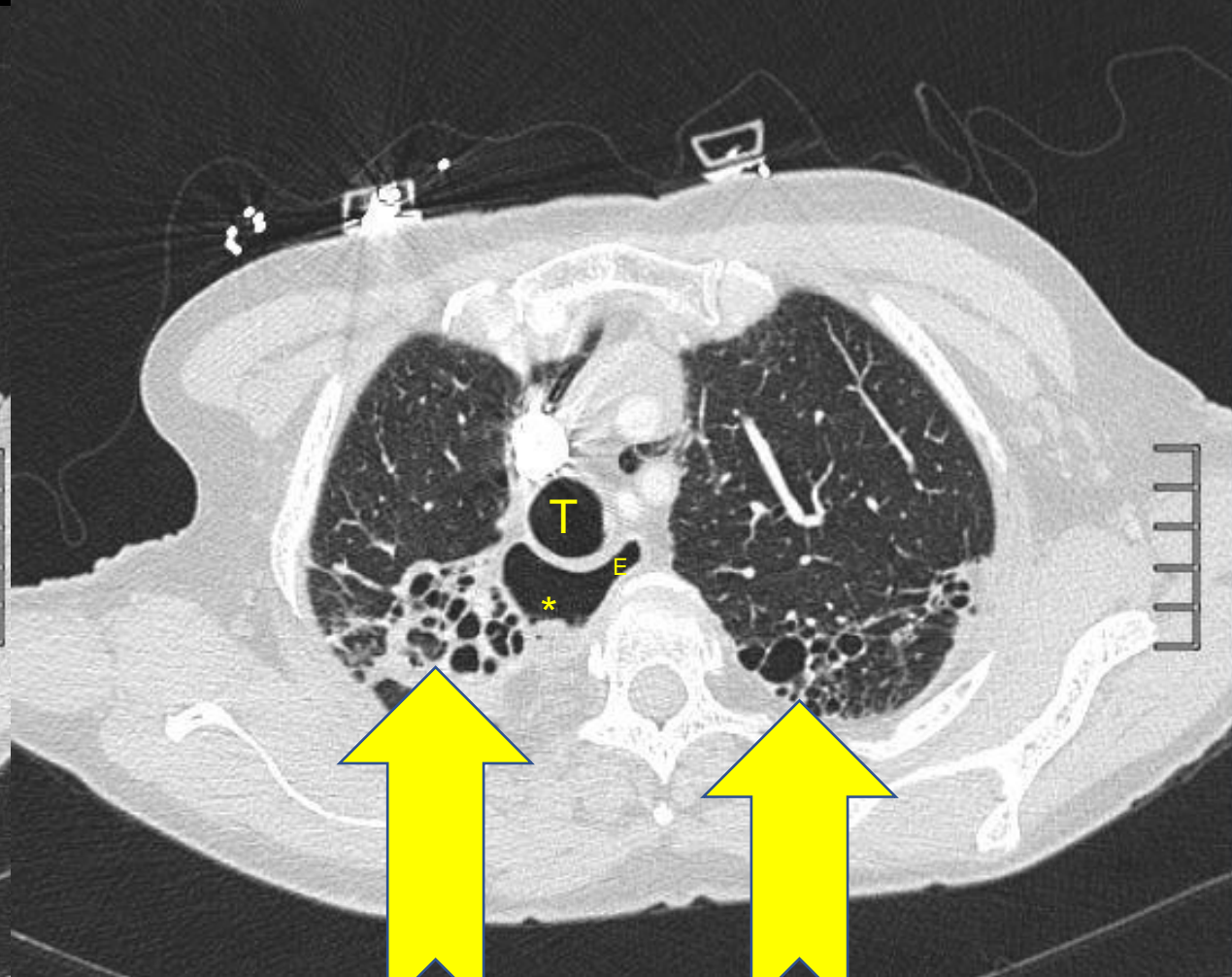
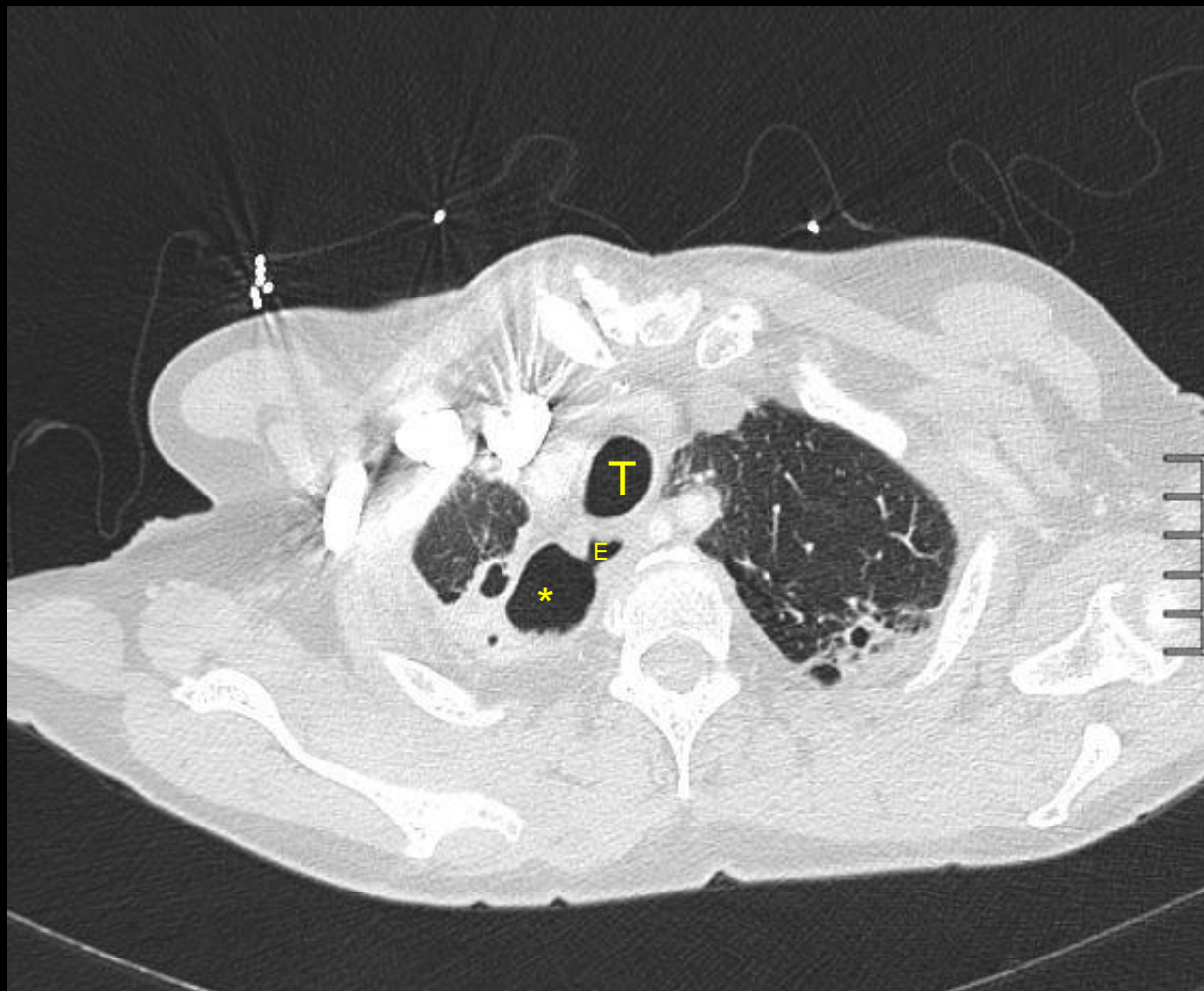


Previous CT



Findings

Outpouching/diverticulum (*) off of the tracheal esophagus (E) related to fibrotic changes in the upper lobes (arrows), presumably from old granulomatous disease. Note the midline trachea (T)



Final Dx:

Traction Diverticulum

Case Discussion

- Diverticulum formed by pulling force of contracting bands of adhesion
- Often a result from tuberculosis or mediastinal lymphadenitis
- Patients often present with dysphagia or recurrent aspiration
- Increased risk of ulceration and fistulation
- Depending on severity of symptoms, main treatment would be surgical with a potential follow up esophageal myotomy

References:

NCBI: Ballehaninna UK, Shaw JP, Brichkov I. Traction esophageal diverticulum: a rare cause of gastro-intestinal bleeding. *SpringerPlus*. 2012;1(1):50. doi:10.1186/2193-1801-1-50.

ACR Appropriateness Criteria: <https://acsearch.acr.org/docs/69495/Narrative/>

Clinical Radiology: The Essentials. Dr. Richard H. Daffner, Dr. Matthew Hartman, Fourth Edition.