

## Introduction

- Esophageal actinomycosis is a rare type of esophageal infection and presents as erosions or ulcers under endoscopy.
- Here we present a 63-year-old woman who complains of dysphagia.

## Introduction

- A 63-year-old Chinese female with a history of gastritis presented with solid food dysphagia and epigastric pain over a month.
- The pain was not improved after PPI but relieved by self-induced vomiting.
- A review of system showed 10lb weight loss over a month with a recent history of hospitalization for self-resolved hematemesis.
- Prior esophagogastroduodenoscopy (EGD) and colonoscopy were normal 3 years ago.
- CT of the chest demonstrated a 1.7 cm circumferential mass in the mid-esophagus with luminal narrowing (Figure A).
- EGD discovered a friable soft circumferential mass 26-29 cm from the incisors that are not actively bleeding but covered with blood clots (Figure B).
- Biopsy showed esophageal mucosa with ulceration and actinomyces infection.
- The patient was started on amoxicillin to treat actinomyces infection. Meanwhile, the patient underwent a repeat EGD for re-biopsy given concerns for malignancy, which resulted in poorly differentiated invasive squamous cell carcinoma.
- EUS was performed for staging of esophageal cancer but limited as the mass could not be traversed by endoscopic ultrasound (EUS)(Figure C).Based on endosonographic criteria, the mass was limited-staged uT3N1Mx.
- Later PET-CT illustrated local advanced disease with atrium involvement (Figure D).
- The patient underwent neoadjuvant chemotherapy with carboplatin-taxol and radiation followed by esophagogastrectomy for curative intent.

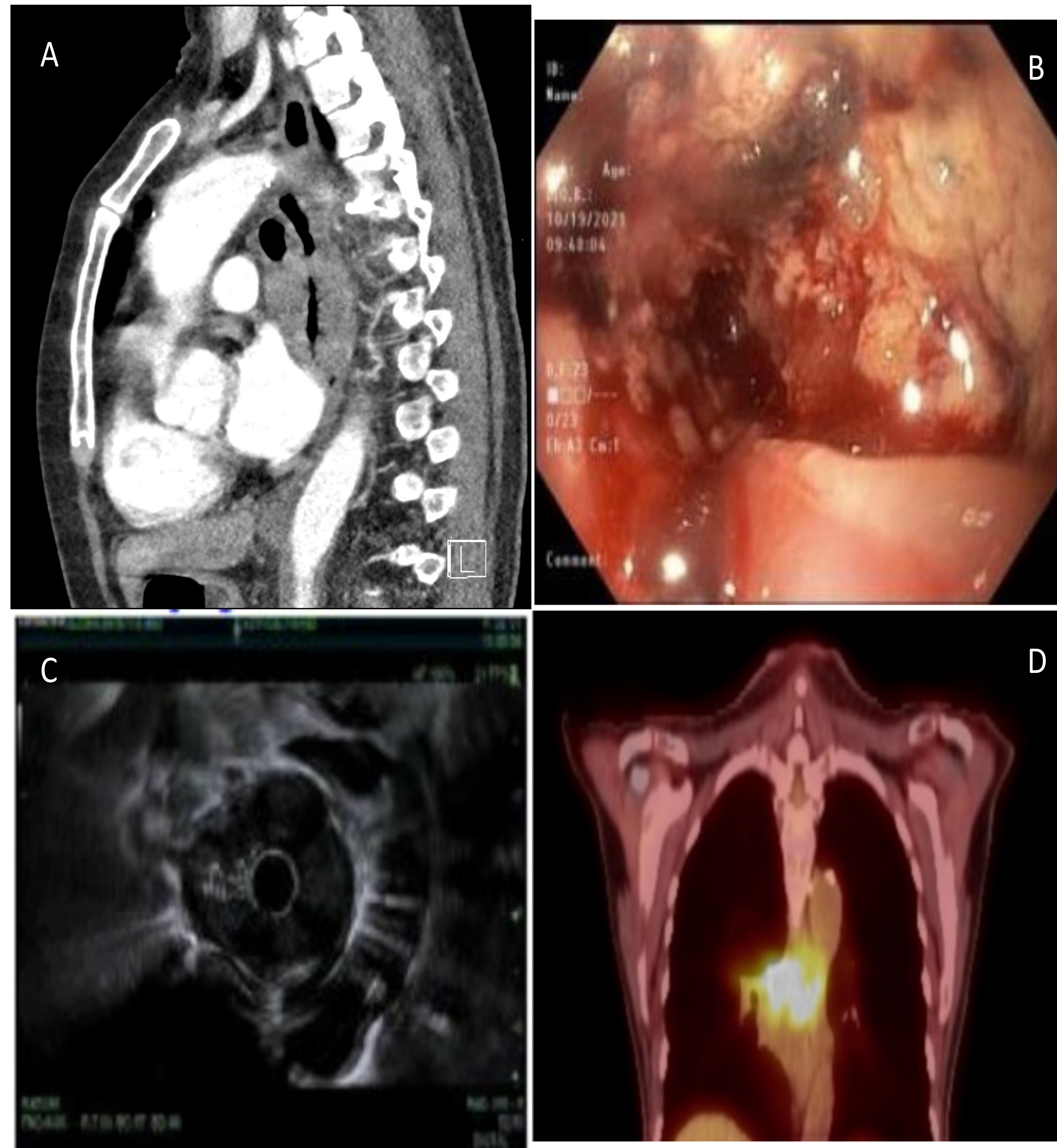


Figure A. CT of chest demonstrated a 1.7 cm mass present in the mid-esophagus with lumen narrowing.  
 Figure B. A friable mass without active bleeding but covered with blood clot on endoscopy.  
 Figure C. EUS: limited staged uT3N1Mx.  
 Figure D. PET-CT showed local advanced disease with atrium involvement.

## Discussion

- Actinomyces are facultative anaerobic, Gram-negative bacilli. They commensally live within the oral cavity and gastrointestinal tract.
- Most esophageal actinomyces (EA) infection was previously described to resemble esophagitis or esophageal ulcers, with endoscopic description being extensive necrotic areas.
- EA typically presents with dysphagia and odynophagia, particularly in immunocompromised patients or malignancies.
- Actinomyces species capitalize on tissue injury or mucosal breach to invade adjacent structures and spreads regardless of anatomical barrier, thus mimicking malignancy.
- In our case, the local tissue damage caused by neoplastic disease or irradiation predisposed the actinomyces infection.

## Conclusions

Clinicians need to have a high index of suspicion and clinical knowledge regarding esophageal actinomyces unusual presentations and ability to mimic malignancy.



## Contact

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