

Definitive Endovascular Treatment of Aortoesophageal Fistula in a Young Patient

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BACKGROUND

Aortoesophageal fistula (AEF)

- Rare and highly fatal disease
- **HIGH operative morbidity and mortality**

Several treatment options for AEF

- Surgical replacement with staged esophageal reconstruction
- Endovascular treatment and staged open surgical repair
- Evidence-based guidelines could not be established due to the rarity of the disease.

CASE REPORT

Patient

- A 27-year-old female who had no underlying disease
- No history of foreign body ingestion or major trauma

Chief complaint

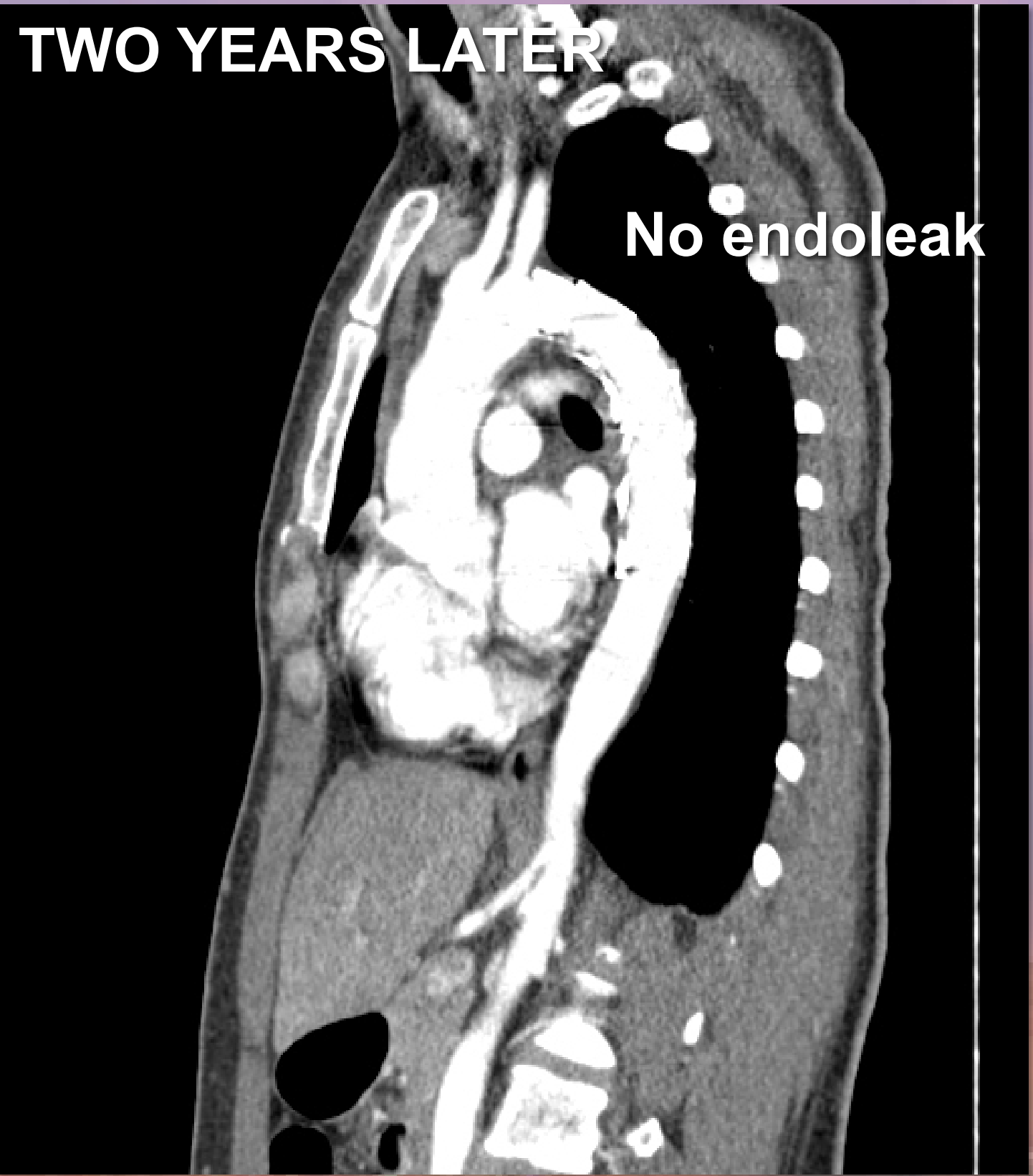
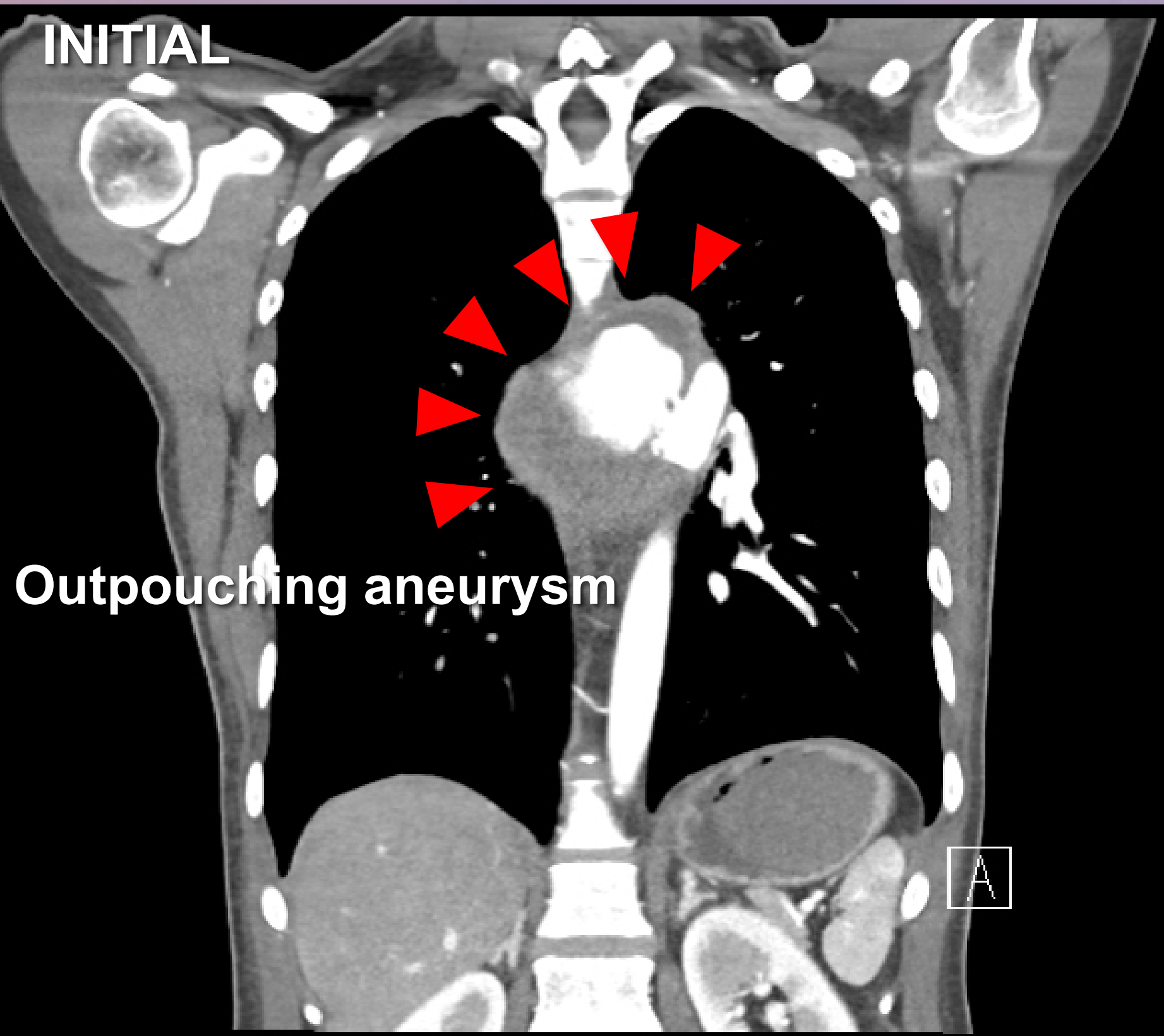
- Abrupt hematemesis with hypovolemic shock

Emergent endoscopy for the upper gastrointestinal tract

- Extensive hematoma in the esophagus without evidence of ongoing bleeding (**Figure 1A**)
- A pulsatile mass-like lesion compressing the esophagus at 24-33 cm from the incisor (**Figure 1B**)



2-YEAR FOLLOW-UP



CT scans

- A 6.6 × 5.0 cm outpouching structure from the descending thoracic aorta, compressing the adjacent esophagus

Diagnosis

- **AEF with an outpouching aneurysm** at the descending thoracic aorta

Treatments

- **Emergent zone 3 TEVAR** under local anesthesia
- **Primary repair of the ruptured esophagus** with evacuation of the hematoma (8 days after TEVAR)

HOSPITAL COURSE AND FOLLOW-UP

Hospital course

- No acute complication
- Esophagograms (the 11th postoperative day): no contrast leak
- Oral diet

2-year follow-up

- No endoleak, no relapse of the infection

CONCLUSION

Definitive TEVAR for AEF

- Should be **very cautiously** performed in carefully selected patients
- Life-long follow-up

DISCUSSION

Indwelling thoracic stent graft for AEF

- Concern of disseminated **mediastinal infections**
- Leaving the stent graft should be decided only if an associated infection can be excluded entirely.

Figure 1

