

Atrial Esophageal Fistula

A Case Report and Review

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Background

- Atrial to esophageal fistulas (AEF's) are an abnormal communication between the atrium and the esophagus.
- Often occurs as a result of trauma, although idiopathic fistulas have been described in the literature¹.
- AEF is a rare but serious complication of catheter ablation for atrial fibrillation (AF) with an incidence of 0.01-0.02%² and mortality rates reported as high as 67-100%³.

Objective

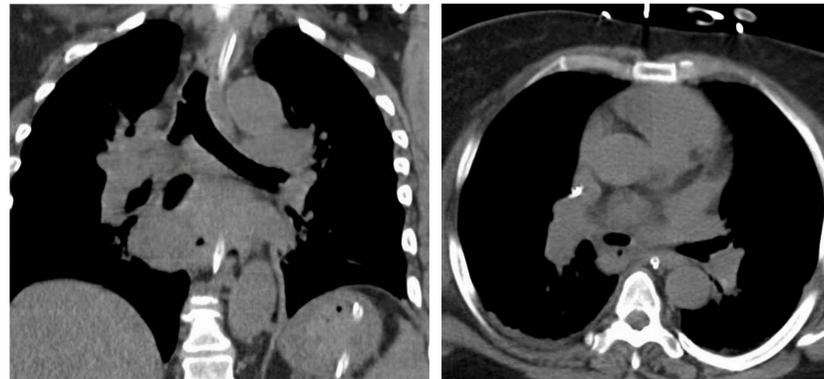
- To provide a brief review of a rare but serious complication of catheter ablation for atrial fibrillation.

Case Report Details

- A 53 y.o female with a history of atrial ablation three weeks prior presented to the ED with complaints of chest pain and hematemesis.
- STEMI secondary to embolic occlusion of the distal LAD.
- Acute mental status decompensation during cardiac catheterization
- CT head demonstrating contrast dye from the cardiac procedure.
- CT chest without contrast revealing a 2.9 x 2.2cm abnormal gas and fluid collection within the mediastinum abutting the left atrium within the transverse pericardial recess with gas extending toward the esophagus consistent with atrial-esophageal fistula.
- Emergent thoracotomy to repair the defect; unfortunately, the patient succumbed to her injury shortly thereafter.

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CT Imaging



• Coronal

• Axial

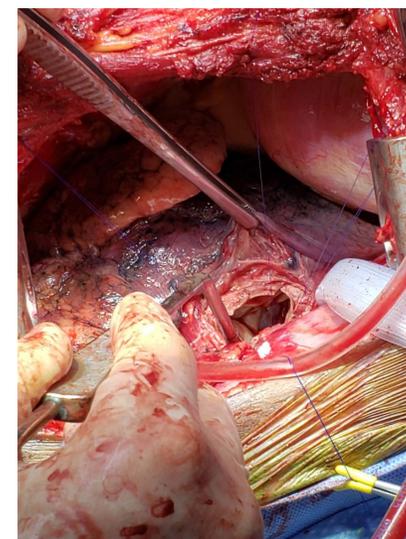


• Sagittal

Operative Findings



• Atrial Defect



• 2 cm Esophageal defect

Discussion

- Atrial-esophageal fistula is an exceedingly rare complication;
- Incidence is likely to increase with increasing cardiac ablation.
- The signs and symptoms of AEF are not specific.
- A review of 53 cases⁴ showed that the most common signs and symptoms are
 - Fever (83%)
 - Neurologic deficits (51%)
 - Hematemesis (36%)
- CT with contrast is the gold standard for diagnosis.
- Treatment options include surgical repair, esophageal stenting, and conservative management with chest tube placement and infection prophylaxis⁵.
- Significant morbidity and mortality even with identification and surgical intervention.

Conclusion

- Suspicion and early identification of this rare but deadly complication is essential as its incidence may increase in tandem with increasing rates of atrial fibrillation.

References

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