Endovascular treatment of aortobronchial fistula in patients sustained open surgical repair for thoracic aorta lesion: Two cases
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Introduction

• Secondary aortobronchial fistula is an uncommon clinical entity. [1,2,3]

• Hemoptysis is the main clinical symptom and it ranges from repetitive (self-limiting) episodes of hemoptysis to torrential hemorrhage, [1,2,3]

• We present two patients whose aortobronchial fistula was formed secondary to open surgical repair of thoracic aorta lesion and who both underwent uncomplicated endovascular treatment.

Case report

The first case was a 55-year-old male who transferred to the E.R with massive hemoptysis. His also reported recurrent (mild) hemoptysis the last 2 months. His medical history included open surgical repair of traumatic thoracic rupture (10 years ago) using Dacron graft. We performed a CT angiography which revealed a pseudoaneurysm (diameter: 4.2cm) in proximal anastomosis (Pic.1). The patient underwent an emergent endovascular repair using tube endograft (GORE TAG - 15cmX31mm).

CT angiography revealed disappearance of pseudoaneurysm. (Pic. 3) The patient remains asymptomatic with normal findings on CT scan 12 years following endovascular therapy (Pic.4).

The second case was a 61-year-old male who reported three episodes of hemoptysis during the last 3 months. He had undergone open surgical repair of dissection of the aorta (4 years ago) using Dacron graft. CT-scan revealed a pseudoaneurysm in distal anastomosis (Pic. 5). He underwent urgent endovascular repair using tube endograft (GORE TAG 10cmX28mm) (Pic 7). Pseudoaneurysm disappeared the first month postoperatively. Follow-up consisted of clinical examination and CT angiography, (Pic. 6, 8) without recurrence or other complication noted 4 years following TEVAR.

Discussion - Conclusion

• When evaluating hemoptysis in a patient who had open surgical repair of thoracic aorta, presence of aortobronchial fistula should be first excluded. Prompt diagnosis and expedient management is a prognostic factor for the survival of those patients. [1,3]

• Regarding diagnostics tools, CT angiography is the method of choice. DSA or bronchoscopy may induce massive hemorrhage . [3]

• Long-term antibiotic therapy is recommended. [1,2,3] Both patients were under antibiotic therapy for 3 months. There was no evidence of systematic infection (PCT, WBC, CRP) since then.

• Some authors suggest that endovascular therapy could serve only as bridge therapy because its high risk of infection [3].

• Considering our experience, we believe that endovascular therapy should be the first choice treatment and could be the definite therapy.

References