

Does minimally invasive also stand for minimal patient risk? Lessons from an upper gastrointestinal endoscopy

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DESCRIPTION

A 70-year-old man with recent myocardial infarction was referred for upper gastrointestinal endoscopy because of persistent anaemia and iron insufficiency. The procedure was poorly tolerated by the patient, which revealed Barrett's oesophagus and gastroduodenal angiodysplasia, and since then he started referring hoarseness and dysphagia.

Few weeks later, the patient was readmitted with heart failure and elevated inflammatory parameters, without an identifiable focus of infection. Chest radiograph (figure 1) showed a widened superior mediastinum not previously present, and blood cultures were positive for methicillin-resistant *Staphylococcus aureus*. He underwent transthoracic echocardiogram that disclosed severe left ventricular dysfunction, no significant valvular disease or vegetations and normal ascending aorta diameter (aortic arch was poorly defined). The patient due to complaints related to the recent endoscopy rejected a transoesophageal approach. On the presumption of endocarditis, antibiotic treatment was initiated.

Owing to persistent dysphonia and progressive dysphagia, he underwent indirect laryngoscopy that visualised left vocal cord paralysis in paramedian position. Followed by CT thoracic angiography (figures 2 and 3) revealing a saccular structure with calcified foci in the aortic arch (9×5×4 cm) with compression of the adjacent structures (larynx, oesophagus, recurrent laryngeal nerve).¹

The patient was deemed unfit for surgery, and was put on long-term antibiotic therapy with possible subsequent aneurysm repair. Few days later, he presented with massive haematemesis resulting from an aorto-oesophageal fistula, and died of that complication.



Figure 2 Chest CT angiogram—aortic aneurysm (symbol).

Learning points

- ▶ There are serious risks to be considered even in minimally invasive procedures, which need to be acknowledged by the physician and disclosed to patients.
- ▶ Rarely, aortic thoracic aneurysm has been recognised following an upper gastrointestinal endoscopy. The pathophysiological mechanism implies arterial structural changes, predisposing to aortic wall fragility, mostly congenital or age-related.
- ▶ Aortic aneurysm rupture risk is ill-defined, however, related to the location and size of the aneurysm. Primary treatment for aortic thoracic aneurysm is surgical repair, and the optimal timing to procedure should be carefully evaluated due to significant surgical mortality risk.

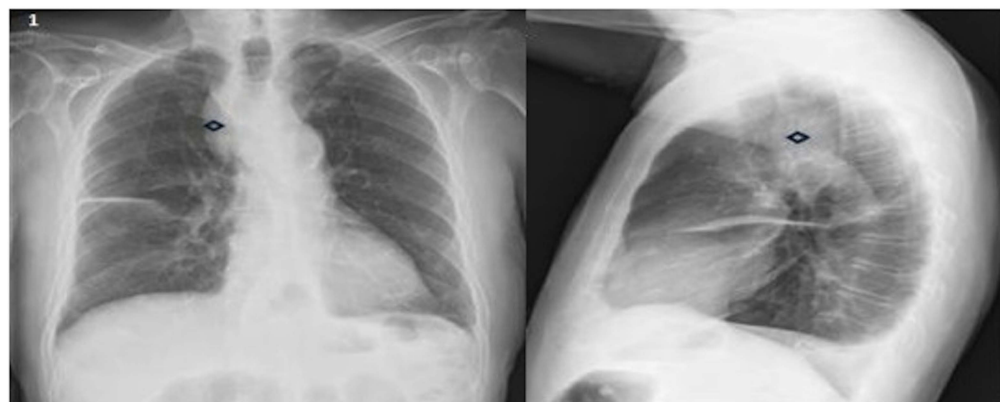


Figure 1 Chest radiograph (posteroanterior and lateral views)—aortic aneurysm (symbol).



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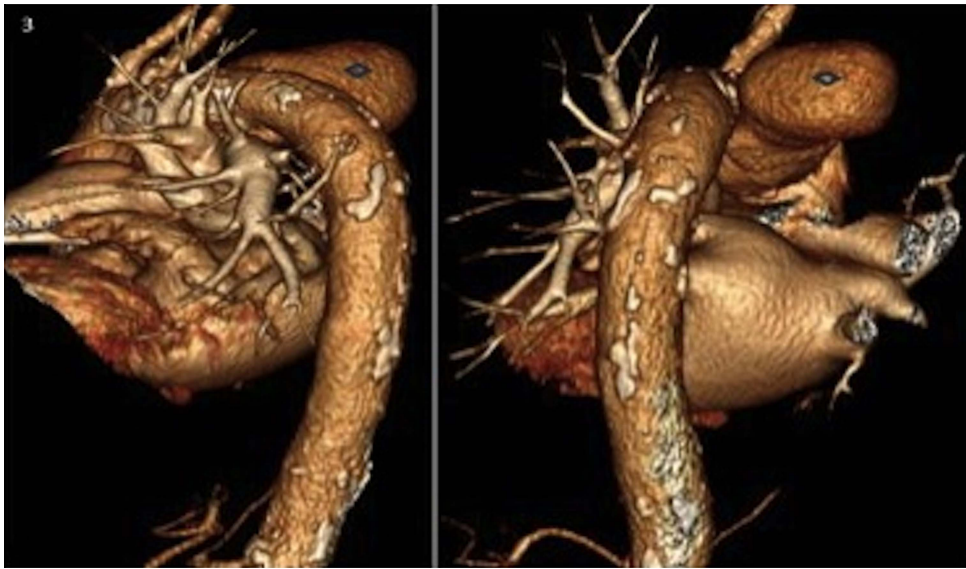


Figure 3 Volume rendering of thoracic aortic aneurysm (symbol).

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