

Endovascular treatment of an aorto-oesophageal fistula caused by oesophageal cancer

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DESCRIPTION

Aorto-oesophageal fistula (AOF) is commonly the product of aortic aneurysms or iatrogenic injuries during endovascular aortic procedures; despite that, AOF is an uncommon medical condition. In rare cases, it can be the product of an oesophageal carcinoma. It is a fatal condition, and its treatment options are scarce due to its low incidence.^{1,2} The case presented herein aims to show an endovascular treatment for AOF.

A 50-year-old male patient presented with odynophagia, progressive dysphagia and weight loss for 4 months prior to the consultation. The patient sought the emergency healthcare service due to haematemesis and melena for 6 days. He was submitted to haemodynamic recovery, blood transfusion and to an upper gastrointestinal tract endoscopy, which revealed an ulcerative and vegetative tumouration on his oesophagus 25 cm below his upper dental arcade. Biopsy confirmed the hypothesis of a malignant oesophageal carcinoma with moderate cell differentiation. Despite the aforementioned interventions, his blood cell count decreased, and his haematemesis worsened; thus, immediate radiotherapy was performed (400 cGY) to treat the tumour.

On the next day, the patient still presented with haematemesis and a low blood cell count.



Figure 1 Arteriography showing opacification of the oesophagus characterising an aorto-oesophageal fistula.

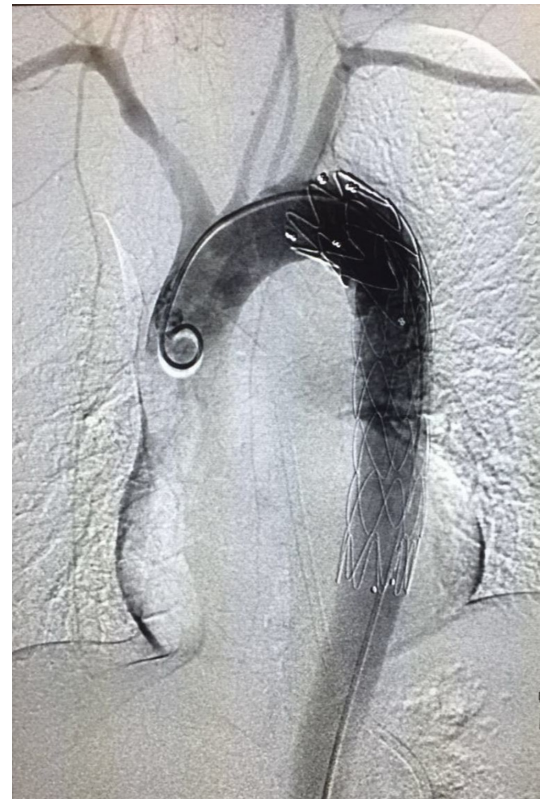


Figure 2 Postoperative arteriography displaying the endovascular prosthesis and resolution of the aorto-oesophageal fistula.

Embolisation of the gastro-oesophageal arteries was performed. An aortic arteriography was performed, although no active haemorrhage was found. However, when the oesophageal branches were identified, an AOF was encountered (figure 1). Vasa vasorum bleeding was ruled out due to massive blood loss and subsequent haemodynamic complications.

A 32×32×150 mm endoprosthesis (Valiant Captivia, Medtronic, Minnesota, USA) was placed on origin of the left subclavian artery, and a 46 mm accommodation balloon (Reliant, Medtronic) was placed on the aorta (figure 2). Open thoracic surgery was not performed, as it possesses higher mortality rates than endovascular treatments.

Follow-up arteriography was performed that showed resolution of the AOF; however, the patient went to the intensive care unit highly unstable. Vasoactive drugs were administered, and blood transfusion was performed as well; however, due to massive blood loss prior to the surgery (hypovolaemic shock), the patient died 24 hours later.



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Learning points

- ▶ Despite rare, oesophageal cancer can be a cause of aorto-oesophageal fistulas.
- ▶ Endovascular treatment for these fistulas can be successfully achieved.

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