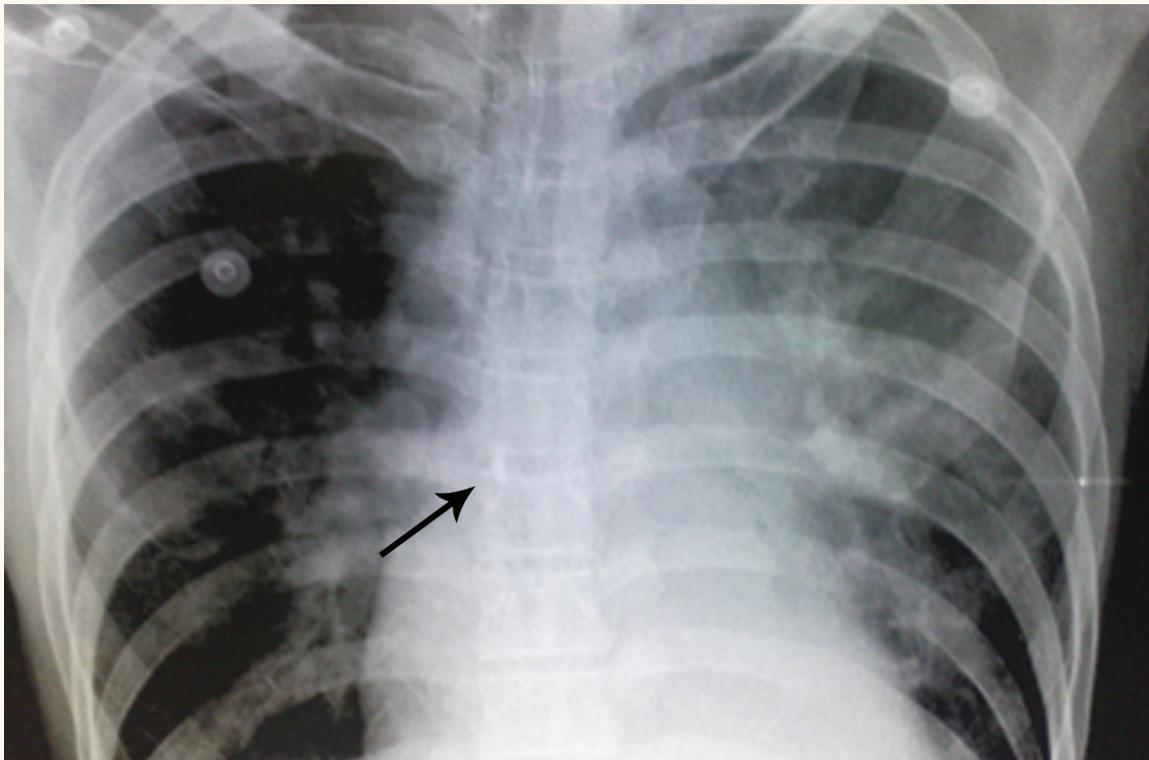


## Aorto-esophageal Fistula caused by a Foreign Body

\*Badriya Al-Saqri,<sup>1</sup> Atheel Kamona,<sup>2</sup> Neela Al-Lamki<sup>3</sup>

ناسور أبهرى مريئى سببه جسم غريب

بدرية الصقري، أثيل كمونة ، نايلة اللمكي



**Figure 1:** Chest X-ray showing the widened mediastinum and lung infiltrates. The black arrow indicates the possible foreign body lying perpendicular to the mediastinum

**L**ESS THAN 1 % OF INGESTED FOREIGN bodies cause perforation of the gastrointestinal tract,<sup>1</sup> even rarer is an aortic pseudoaneurysm with the consequence of an aorto-esophageal fistula (AEF) caused by foreign body. AEF has a high fatality rate; only a few cases of AEF caused by foreign bodies were treated successfully in the world.<sup>2,3,4,5</sup>

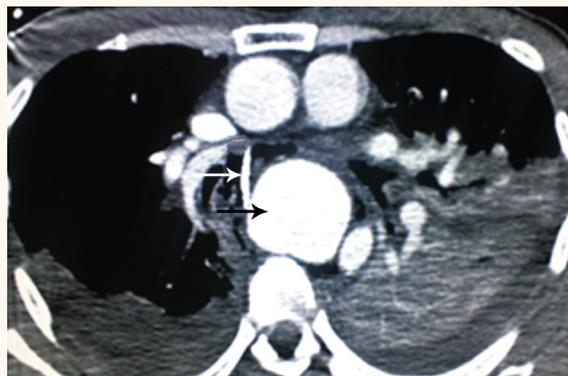
A 42 year-old previously healthy male presented to a local health centre with odynophagia of 5 days duration. The initial X-ray was normal and

the patient was discharged home [Figure 1]. The following day, the patient started vomiting with blood clots in the vomitus. He continued to have odynophagia, but no dysphagia, and was only able to tolerate liquids.

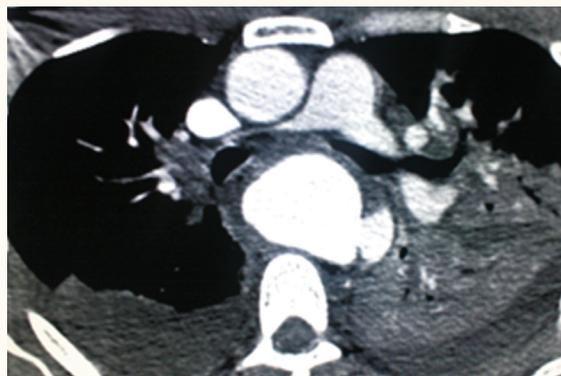
The patient returned to his local health centre and was admitted. During admission he became febrile, hypotensive, tachycardic and developed episodes of haematemesis. He was started on antibiotics. He became irritable, so he was sedated

<sup>1</sup>Department of Radiology & Molecular Imaging, Sultan Qaboos University Hospital, Muscat, Oman; <sup>2</sup>Department of Radiology, Division of Medical Imaging, Royal Hospital, Muscat, Oman; <sup>3</sup>Department of Radiology & Molecular Imaging, College of Medicine & Health Sciences, Sultan Qaboos University, Muscat, Oman.

\*Corresponding Author email: b\_saqri@hotmail.com



**Figure 2a:** Axial contrast enhanced computed tomography scan: pneumomediastinum, left upper lobe consolidation. White arrow = foreign body, black arrow = aortic pseudoaneurysm



**Figure 2b:** Aortic pseudoaneurysm



**Figure 3a:** Coronal reformat of the computed tomography scan of the chest showing aortic pseudoaneurysm, extensive mediastinitis and left lung consolidation



**Figure 3b:** Sagittal reformat of the computed tomography scan showing aortic pseudoaneurysm

and intubated and sent by ambulance to our institution, the Royal Hospital, Oman, which is a tertiary care centre. An esophagogastroduodenoscopy (OGD) was done which revealed considerable mucosal oedema in the esophagus with ulceration and what looked like friable fleshy material distally. The OGD was stopped at this stage and the patient was referred for a computed tomography (CT) examination of the chest.

The chest CT showed pneumomediastinum, bilateral moderate pleural effusions with left upper lobe consolidation and atelectasis of the right lung lower lobe. There was a linear 1 cm dense structure

lying in perpendicular position in the mediastinum communicating with the right main bronchus. In addition, there was a pseudoaneurysm of the descending thoracic aorta [Figures 2 and 3].

The patient was immediately taken to the operating theatre. A right-sided thoracotomy was performed. During surgery severe mediastinitis was found with approximately 1L of dirty infected fluid in the right side of the chest and around 1L of haemoserous fluid in the left side of the chest. There was 2 cm sharp piece of bone centered in the mediastinum.

A thin false aneurysm of the thoracic aorta was seen contained in the wall of the oesophagus.

There was a 1.5 mm defect in the aorta and 1 cm mucosal defect in the oesophagus denoting double perforation. The false aneurysm was opened and the defect in the aorta as well as the oesophageal defect were located and closed.

The patient survived the surgery; however, he died in the post-operative period because of circulatory arrest.

AEF is an extremely rare cause of upper gastrointestinal haemorrhage. CT scanning is an essential diagnostic tool for these cases as it helps to assess a suspected aortic pseudoaneurysm, mediastinitis and the extent of soft tissue involvement. It is also helpful in planning for therapeutic drainage or aspiration.<sup>6</sup>

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