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ANSWER: BOERHAAVE SYNDROME (BS) COMPLICATED BY PERICARDITIS SECONDARY TO OESOPHAGEAL PERFORATION.

The ECG (Figure 1), demonstrated wide-spread saddle shaped ST elevation with PR depression, suggestive of pericarditis. Figure 2, curvilinear lucency outlining the cardiac borders (arrows), consistent with pneumopericardium. A tubular lucency superimposed over the left upper cardiac border (black arrowheads) represents the left main bronchus. There is no overt pneumothorax, pneumomediastinum, or subdiaphragmatic free gas.

Spontaneous rupture of the oesophagus is rare in clinical practice, but it is associated with significant mortality of 20-40%.¹ Early clinical suspicion and imaging are key to achieving a good outcome. Chest X-ray findings are often non-specific, and may be normal. Indirect features on a chest X-ray can point towards oesophageal injury. Such signs include left pleural effusion, pneumomediastinum, subcutaneous emphysema, hydrothorax, pneumothorax and collapse of the lung.²

A CT of the thorax should be performed early when a diagnosis of oesophageal rupture is suspected, abnormalities include extraluminal air, peri-oesophageal fluid, oesophageal thickening and extraluminal con-

trast.³ CT thorax and abdomen of our patient confirmed the presence of pneumopericardium, mild pericardial fluid within a thickened, enhancing pericardial sac (Figure 3). At the level of the left atrium, the anterior oesophageal wall appeared indistinct and small adjacent extraluminal gas locules were noted, suggestive of oesophageal perforation, resulting in purulent pericarditis (Figure 4). CT is also able to characterise any associated mediastinal or pleural contamination, which will help in surgical planning.

With oesophageal perforation, our patient underwent right thoracotomy, pericardiotomy with washout, and bilateral chest tube insertion. A perforation of the anterior oesophageal wall into the pericardium was confirmed at surgery. The inflamed pericardial sac was drained of haemopurulent fluid, and the oesophageal perforation repaired in layers. Post-operatively, the patient received antibiotic treatment with intravenous Piperacillin-Tazobactam.

The patient was admitted to the Intensive Care Unit for continued post-operative management. He was discharged well on post-operative day 22.

In conclusion, imaging tools, i.e. chest radiography and computed tomography of the chest play crucial roles in early and accurate diagnosis of BS. Timely diagnosis and definitive treatment will improve outcome and survival rates.

REFERENCES

- 1: [Schipper J.P, Pull ter Gunne A.F., Oostvogel H.J.M et al. Spontaneous Rupture of the oesophagus. Boerhaave's Syndrome in 2008. Digestive Surgery 2009; 26:1.](#)
 - 2: [Jon Arne Soreide and Asgaut Viste . Esophageal perforation: diagnostic workup and clinical decision making in the first 24 hours. Scand Journal of Trauma, Resuscitation and Emergency Medicine 2011 19:66.](#)
 - 3: [Lee S, Mergo PJ, Ros PR. The leaking esophagus: CT patterns of esophageal rupture, perforation and fistulisation. Critical Review Diagnostic Imaging 1996 Dec;37\(6\): 461-90.](#)
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