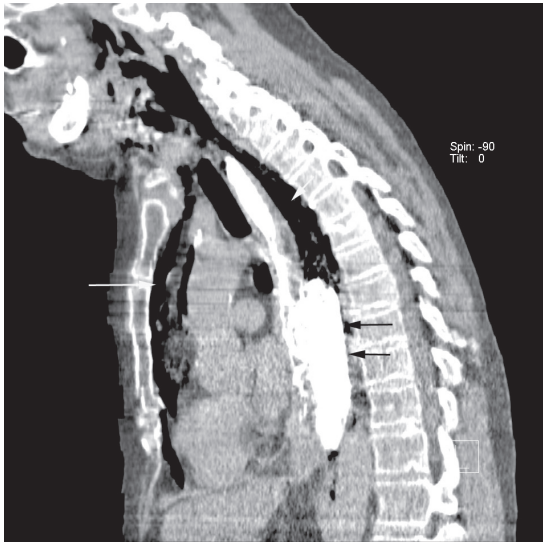


Case 51 A fateful vomit



(a)



(b)

Figure 55.1

A town councillor collapsed at home shortly after returning home from the annual Mayoral banquet where he had overindulged. He had developed a crushing central chest pain shortly after vomiting back a good deal of the banquet. There was no blood in the vomitus. Over the next couple of hours the pain increased in severity, and he also developed left shoulder tip pain. His general practitioner referred him into the admitting physicians as a probable myocardial infarction, and indeed there were ischaemic changes on the electrocardiograph that was performed when he arrived in hospital.

On arrival he was pale, cold and clammy, with a blood pressure of 90/60 mmHg and a tachycardia of 110/min. The examining resident elicited subcutaneous crepitus (surgical emphysema) over the upper chest, a finding for which he could find no explanation. The admission chest X-ray confirmed air in the tissues and fluid in the left subphrenic space. A thoracic CT scan was then undertaken as the patient swallowed soluble contrast. Figure 55.1 shows a transverse and sagittal section through the chest.

What is the most likely diagnosis?

The patient has sustained a rupture of the oesophagus. This usually occurs at the hiatus and extends proximally for a varying distance, and the history is typical. Subcutaneous crepitus may extend up to the face, and is a response to the pneumomediastinum. ECG changes are common, and reflect the ensuing chemical and bacterial mediastinitis. The CT images show contrast leaking out of the oesophagus (Fig. 55.1a, black arrows) and air in the mediastinum on both the sagittal and transverse sections (white arrows on Fig. 55.1a, b).

After whom is it named, and in whom was it described?

This is Boerhaave's syndrome,* named after the physician

*Hermann Boerhaave (1668–1738), physician, Leiden, the Netherlands.

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who described it at the autopsy of the Grand Admiral of the Dutch Fleet.

What is the appropriate investigation to confirm the diagnosis?

A contrast swallow, using a water-soluble contrast medium. While barium gives better pictures it is very difficult to remove from the mediastinum and pleura since it is barely water soluble, so Gastrografin or a similar water-soluble contrast agent is used.

What treatment is required?

Surgery is required to repair the tear and wash out the mediastinum and chest. Broad spectrum antibiotics are

appropriate, and a jejunostomy is fashioned for enteral feeding while the repair heals. Repairing the tear may involve wrapping the fundus of the stomach around the repair, but large tears may require a resection and primary anastomosis with mobilized stomach. Large bore chest drains are placed, and will give an early indication of a leak from the anastomosis.

What is the likely outcome, and on what does this depend?

The prognosis depends on the delay between rupture and surgery, since the longer the delay the poorer the tissues are to repair. Good postoperative nutritional support is vital.