Interventions, case progress and outcomes:

Assess the progress of her oesophageal tear every 30 minutes. Five days into the patient’s admission, a swallow test was conducted which revealed subcutaneous emphysema in the neck and supraclavicular region and pneumomediastinum. The CT report highlighted a spontaneous oesophageal perforation (Boerhaave’s syndrome).

Presentation and Diagnosis

The diagnosis of Boerhaave’s syndrome is challenging due to the non-specific symptoms and delays in presentation for medical care. However, Boerhaave’s syndrome is a transmural perforation of the esophagus (as shown in Figure 1) which differs from Mallory-Weiss syndrome, a non-transmural oesophageal tear also associated with vomiting as shown in Table 1. The distinction between these conditions is important given the different approach to management and the prognosis. Boerhaave’s syndrome is associated with forceful vomiting after excessive drinking or overeating, followed by severe chest pain, dyspnea, mediastinal or subcutaneous emphysema and cardiovascular collapse. Swallowing may exaggerate the pain and may cause coughing. Diagnosis of Boerhaave’s syndrome is suggested on chest X-ray and confirmed by chest CT scan. Diagnosis can also be confirmed by water-soluble contrast esophagogram which reveals the location and extent of extravasation of contrast material.

Treatment

Despite a large number of studies, the management of Boerhaave’s syndrome remains controversial and there are no best practice guidelines to determine management of this rare condition. Patients presenting with Boerhaave’s syndrome usually require early and aggressive surgical interventions such as open and wide mediastinal and chest drainage and resection is usually undertaken to manage the primary repair. However, surgical mortality after 24 hours of initial perforation becomes equal to that of a more conservative approach. Cameron et al. proposed a set of criteria whereby conservative management may be a viable option in situations where there is a contained leak, no underlying oesophageal pathology and minimal symptoms or signs of sepsis.

Interventions, case progress and outcomes:

This patient was admitted under the upper gastrointestinal team. As the patient was haemodynamically stable, the decision was made to manage her conservatively with regular observations and revision. Boerhaave’s syndrome frequently results in infectious complications therefore she was started on triple antibiotics (gentamicin, amoxicillin (IV) and metronidazole (IV)) and fluconazole for invasive candidiasis prophylaxis. The patient was also placed on an IV proton pump inhibitor, analgesics, strict nil-by-mouth precautions, fluid balance and observations taken every 30 minutes. Five days into the patients admission, a swallow test was conducted which showed no leak. She was discharged home on a soft-pureed diet and a follow-up endoscopy to assess the progress of her oesophageal tear.

References