Oesophageal apoplexy: a forgotten entity

We report a case of spontaneous intramural haematoma in an elderly woman.

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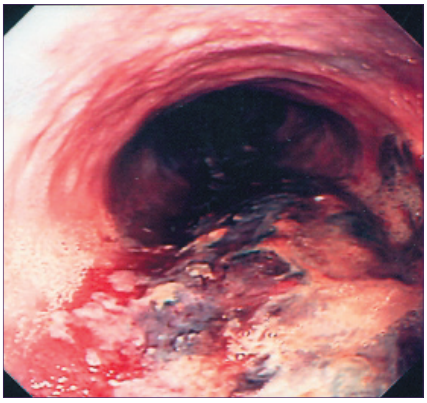
Spontaneous intramural haematoma of the oesophagus is a notable, although rare, cause of chest pain and tends to occur in elderly people. It is also known as oesophageal apoplexy;[1] Marks and Keet first reported a case in 1968.[2] This condition is a clinically important cause of chest pain, and presents as sudden onset of pain, odynophagia, and hematemesis. Intramural rupture of the oesophagus is the third distinct pattern of oesophageal injury, after Mallory-Weiss syndrome and so called rupture of the oesophagus or Boerhaave's syndrome, both of which occur after vomiting.[3]

Figure 1:
Endoscopy of the upper gastrointestinal tract, showing blackish-brown necrotic surface extending down the oesophagus



Case report

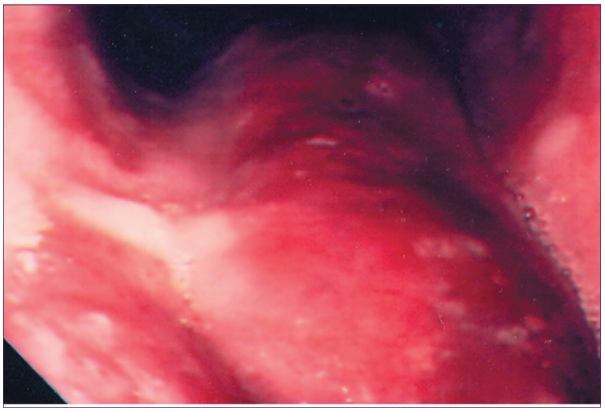
An 84-year-old woman was admitted by paramedics to a medical assessment unit with sudden crushing chest pain that began while she was watching television. She was fit, independent, and mobile with no previous complaints of chest pain or shortness of breath. She did not have any clinically significant medical history, was not on any medication, and had no history of any drug allergy of intolerance. Her pulse, blood pressure, and general and systemic examinations were normal. She was seen by the on-call consultant, and after the results of blood tests (full blood count, urea and electrolytes, D-dimer, and troponin), ECG, and chest X-ray were all within normal limits, she was discharged.

She was readmitted by her general practitioner with similar chest pain and dysphagia 24 hours later. Her initial examination and blood tests were normal, but while waiting for her second troponin result she had a bout of coffee-ground vomiting. She had an endoscopy of the upper gastrointestinal tract within 48 hours, which showed haematoma of oesophagus (figures 1 and 2), and perforation of oesophagus was ruled out by CT of the thorax (figures 3 and 4). She was given proton pump inhibitors and thickened fluids, and made a good recovery. She was subsequently discharged with a repeat endoscopy planned for 5 weeks' time (figure 5).

Possible causes

The cause of spontaneous intramural rupture of the oesophagus remains uncertain, although the possible mechanisms include:

Figure 2:
Endoscopy of the upper gastrointestinal tract showing the haematoma after washing away the debris



1) sub-mucosal haematoma that dissects the sub-mucosal plane and ruptures through the mucosa, which is a potent mechanism of oesophageal apoplexy
2) abnormal swallowing mechanism[4]

Oesophageal haematoma is more common in females with male-to-female ratio of 1:2. Anatomically, the haematoma is mainly identified in the distal oesophagus, because this area is least supported by the adjacent structures—the heart and trachea.[5] Large intramural haematoma have been documented in patients who have thrombocytopenia or haemophilia, and in patients treated with anticoagulation.

Spontaneous causes:

- vomiting, protracted retching
- oesophageal barotrauma
- pill-induced oesophageal injury
- use of anticoagulants or aspirin
- oesophageal arteriovenous malformation

Traumatic causes:

- endoscope intubation, or dilatation
- variceal sclerotherapy
- transoesophageal echocardiogram
- ingestion of foreign bodies

35% of patients present with a triad of retrosternal chest pain, dysphagia, and haematemesis; 80% have two of these features.[6,7] CT scanning is sensitive and specific for oesophageal pathology, and can be diagnostic. Barium contrast studies may show "double-barrel oesophagus and mucosal-stripe sign: both describing the appearance after intramural dissection.[8]

This benign condition typically manifests in elderly patients, and may mimic a neoplasm when viewed endoscopically. The prognosis is good, needing only conservative management, with haematoma resolving after 1–3 weeks leaving a shallow ulcer; occasionally severe bleeding, or perforation of the oesophagus may occur.[4,5,8] Awareness of this condition is needed to guide subsequent investigation and to avoid inappropriate treatment or unnecessary surgical intervention.

We have no conflict of interest.

Figure 3:
Plain CT of the thorax with arrow showing haematoma

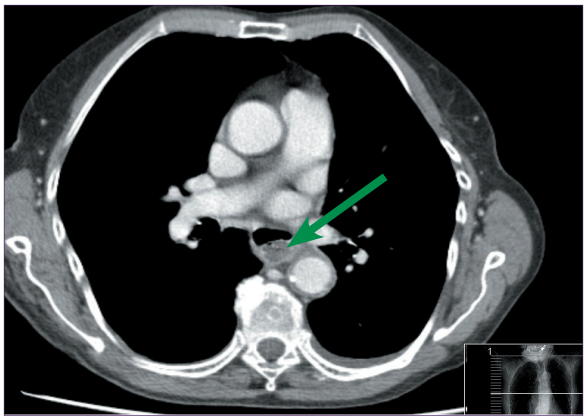


Figure 4:
Contrast CT of the thorax with arrow showing haematoma

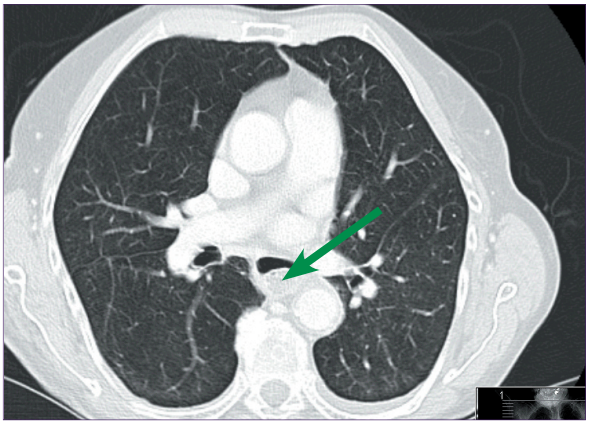
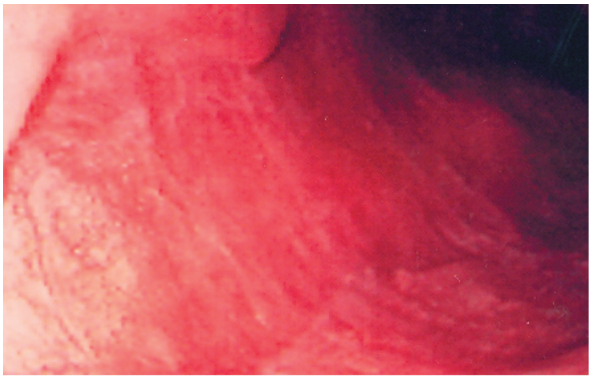


Figure 5:
Follow-up upper-gastrointestinal endoscopy done 5 weeks after treatment showing resolved haematoma with shallow ulcer



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