Intramural oesophageal haematoma—a rare complication of dabigatran

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ABSTRACT

An 85-year-old female presented to hospital with haemoptysis. She underwent investigations which confirmed oesophageal submucosal haematoma. Oesophageal haematoma along with Mallory-Weiss and Boerhaave’s syndromes make up acute mucosal injury of the oesophagus. It can be managed conservatively in the majority of cases.

Discussion

Intramural haematoma of the oesophagus is a rare disease where a rupture of blood vessels in the submucosal layer haemorrhage and cause the formation of haematoma. Underlying vessel fragility with an insult is thought to be the predisposing pathophysiology. The location of the haematoma is submucosal due to the weak attachment of the muscularis propria. The presentation of oesophageal haematoma consists of the triad of haematemesis, retrosternal pain and dysphagia/odynophagia. Eighty percent of patients will have two-thirds of the triad, while only 32–35% will have all three. Risk factors are middle age, female (RR1.8+++), a history of vomiting or coughing and foreign body ingestion. Patients without precipitating factors are more likely to have coagulation abnormalities such as idiopathic thrombocytopenic purpura or be using anticoagulant therapy.

Intramural haematoma of the oesophagus must be differentiated conceptually from Boerhaave syndrome and Mallory-Weiss tears. Boerhaave syndrome is a full thickness oesophageal perforation, due to barogenic injury from forceful vomiting or retching with sudden increase in intra-abdominal pressure. The main symptom is chest pain with an appropriate history; conversely, patients who present with shock are difficult to diagnose as they are less likely to have a classic history. They must be managed aggressively to control mediastinal contamination.
Mallory Weiss tears are a shear injury to the oesophageal mucosa. They occur when abrupt upward diaphragm movement along with rapid increase of intra-abdominal pressure causes the gastric cardia to move through the hiatus into the thoracic cavity. This results in a longitudinal laceration, which is likely to arise at the point of maximal dilatation (Laplace’s law), which is usually within 2cm of the cardia on the lesser curvature. Alternatively, 10% of patients will present with melena and 10% with shock. Computed topography with oral contrast is both sensitive and specific for IHE and can exclude other differentials such as Boerhaave’s syndrome, aortic dissection or aneurysms. Contrast studies can also be used to exclude perforation. Gastroscopy is useful to confirm the diagnosis of oesophageal haematoma and further assess the condition of the oesophagus. Treatment of suspected oesophageal haematoma is 1) to exclude full thickness oesophageal perforation and 2) manage conservatively as most haematomas/tears resolving spontaneously. On occasion, nasojejunal feeding or total parenteral nutrition may be needed to maintain nutrition in the short-term while awaiting resolution of the haematoma. In our patient, oral diet was able to be reintroduced immediately. Complications of oesophageal haematoma are rare but include severe bleeding or oesophageal perforation from pressure effects of the haematoma on the oesophageal wall.

With the ever-increasing availability of cross-sectional imaging, intramural haematoma of the oesophagus will be diagnosed more often. It is an under-recognised condition which is important to be aware of, as exclusion of oesophageal perforation is mandatory, but subsequent management is conservative and prognosis is excellent.

**Figure 1:**

A—Coronal view of the haematoma. It can be seen on the left side of the oesophagus.
B—CT scan showing soft tissue mass on the left oesophageal wall.
C—Lateral x-ray showing residual tablet at posterior aspect of hyoid.
D—Three days later from A showing resolution of haematoma.
E and F—Middle third of oesophagus showing large, elongated haematoma and ulceration. F shows the residual tablet at the distal end of the oesophagus.
Competing interests:
Nil.

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REFERENCES: