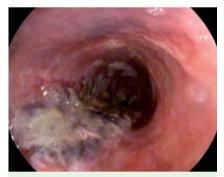
# Intramural esophageal hematoma: an unusual cause of acute chest pain



**Fig. 1** One day after the onset of acute chest pain, a 79-year-old woman developed coffee ground vomitus. Esophagogastroduodenoscopy (EGD) showed a posterior esophageal hematoma.



**Fig. 3** Endoscopic view of the esophagus 12 weeks after initial endoscopy showing full resolution of the intramural esophageal hematoma (IEH).

A 79-year-old woman with a previous history of coronary artery bypass grafting presented with acute onset crushing central chest pain at rest. There were no preceding symptoms. On further questioning, the patient reported odynophagia at the time of symptom onset. She was hemodynamically stable with normal examination findings. Given her cardiac risk factors, she was initially treated as having acute coronary syndrome and received standard antiplatelet therapy. Serial electrocardiography and negative troponin test results excluded acute coronary syndrome.

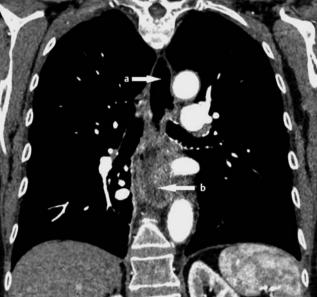


Fig. 2 A subsequent contrast-enhanced computed tomography (CT) scan of the thorax showed a distended esophagus (arrow a) containing echogenic material representing intramural hematoma (arrow b) but with no evidence of perforation.

One day after the onset of pain, the patient developed coffee ground vomitus. An urgent esophagogastroduodenoscopy (EGD) showed a posterior esophageal hematoma from 20 cm to the gastroesophageal junction (**• Fig. 1**). A subsequent computed tomography (CT) scan of the thorax showed a distended esophagus containing echogenic material representing hematoma but with no evidence of perforation (**• Fig. 2**). The patient was managed conservatively with intravenous proton pump inhibitor therapy and slow introduction of a soft diet.

Intramural esophageal hematoma (IEH) is an uncommon, but important, cause of acute chest pain. Delayed or misdiagnosis is common resulting in inappropriate antiplatelet therapy. First described in 1968, it is defined as hemorrhage between the esophageal layers of the mucosa and muscularis propria, often involving a long segment of the esophagus [1,2]. Middle aged and elderly women are at higher risk [3]. Risk factors include Valsalva maneuver, antiplatelet therapy, instrumentation, and trauma. Classic symptoms are acute

severe chest pain with associated vomiting, dysphagia or odynophagia [3,4]. EGD and CT scanning are useful in diagnosing IEH and excluding other pathologies. IEH is often located at the posterior esophagus with EGD showing a typical bluish submucosal hematoma causing a bulging of the overlying mucosa [2–4]. Conservative management consists of proton pump inhibitor therapy, a period of no oral intake followed by the reintroduction of a liquid and subsequently a soft diet [3,4]. Resolution of IEH occurs over 1–3 weeks (• Fig. 3).

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## Benjamin Robert Disney, Shay-Anne Preece, Sauid Ishaq

Department of Gastroenterology, Russells Hall Hospital, Dudley, West Midlands, United Kingdom

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#### **Bibliography**

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### Corresponding author

Benjamin Robert Disney
Department of Gastroenterology
Russells Hall Hospital
Dudley
DY1 2HQ
United Kingdom
b.disney@nhs.net