Is there a place for video-associated thoracoscopy for dissecting intramural haematoma of the oesophagus?

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Received 4 March 2011; received in revised form 30 May 2011; accepted 6 June 2011

Abstract

Spontaneous haematoma of the oesophagus is a rare cause of chest pain. We report the case of a 63-year-old female in whom spontaneous rupture of the oesophagus was suspected, but who was subsequently found to have a dissecting intramural haematoma of the oesophagus. She successfully underwent mediastinal and thoracic drainage by right video-assisted thoracoscopy. Although conservative treatment is widely described in the literature, surgical treatment by right video-associated thoracoscopy may be a suitable alternative if there is a diagnostic doubt.

Keywords: Dissecting intramural haematoma of the oesophagus; Video-associated thoracoscopy

1. Introduction

Dissecting intramural haematoma of the oesophagus (DIHO) is a rare condition that usually occurs in the middle third of the thoracic oesophagus. It is caused by increasing intraoesophageal blood pressure, trauma, coagulopathy and the use of anticoagulant drugs, or is iatrogenic. It can also occur spontaneously without any obvious cause [1, 2].

DIHO is classically located between the area involved in Mallory–Weiss syndrome and the location of the traoesophageal lesions seen in Barrehaeve syndrome.

Here, we describe a case of DIHO in which right video-associated thoracoscopy was successfully used as a diagnostic method and as an alternative to medical treatment.

2. Case report

A 63-year-old female, with nephritic colic and a history of osteoporosis, was suspected of having a spontaneous rupture of the oesophagus. Her symptoms had started one week before admission when she began experiencing retrosternal burning associated with a disabling cough leading to lower retrosternal pain. She suffered from a torn radiating back muscle on the day of admission. There was no vomiting.

Physical examination was normal.

Electrocardiography and troponin levels were unremarkable, as were biological tests (absence of inflammatory syndromes). Thoracic radiography revealed bilateral pleurisy. A right-sided dense opacity (Figs. 1 and 2) extending from the upper mediastinum to the thoracic oesophagus (respecting the cervical and abdominal oesophagus), which did not become more intense after contrast injection, associated with bilateral pleurisy was observed on thoracoabdominal scans. It was decided to perform panendoscopy and right video-assisted thoracoscopy if there still was any diagnostic doubt after this examination. Bronchoscopy revealed an ecchymosed infiltration under the tracheobronchial membrane. The oesophageal mucous membrane was normal on oesopagscopy.

Right video-associated thoracoscopy was carried out, and 300 ml of haemothorax as well as some ‘old blood’ effusion was evacuated after opening the mediastinal pleura, which was distended by an upper mediastinal haematoma at the level of the thoracic oesophagus. A diagnosis of DIHO was made at this point. Simple chest tube drainage was left in place for two days. The patient was allowed to eat after the operation and was discharged on day six. A clinical check-up and scans three months later were normal.

3. Discussion

In 35% of cases, the symptomatology of DIHO shows a triad of symptoms of thoracic pain, haematemesis and dysphagia. At least two of these symptoms are found in 80% of cases [3]. It is advisable to perform thoracic scans immediately so that a potential vital emergency is not missed or inappropriate (antithrombotic) therapy started. These scans typically reveal an intense spontaneous infiltration of the oesophagus.
be linked to Mallory–Weiss syndrome. A submucosal ecchymosed infiltration is usually observed by endoscopy, and computed tomography (CT) scans show a real DIHO aspect in the upper mediastinal space without any extravasation.

In the second type, DIHO is associated with an upper mediastinal haematoma and/or haemothorax and/or symptomatic cardiac compression [4]. This suggests a dissection of the muscular layer or a transmural dissection if the patient has haematemesis. As this type is linked to Boerhaave syndrome, these lesions may be more suitable for surgical diagnostic and treatment by right video-assisted thoracoscopy.

Surgical treatment has largely been discredited in DIHO [5, 6]. owing to massive blood loss. Contrast CT should eliminate the alternative diagnosis of thoracic aortic dissection. When it is done, we were able to carry out successful surgical diagnostic and treatment by right video-assisted thoracoscopy (two or three trocars). This therefore, appears to be an interesting and safe alternative to conservative treatment or thoracotomy. This approach allows:

- Rapid confirmation of the diagnosis;
- Wide opening of the upper mediastinal pleura for rapid cardiac decompression;
- Better drainage of the haematoma and pleura for restitution within one week;
- A less aggressive approach compared with thoracotomy;
- Early reintroduction of oral nutrition;
- Lower cost due to reduced hospital stay.

In a search of the literature, no cases of recurrence of DIHO have been found.

In conclusion, right video-associated thoracoscopy appears to be a safe and effective diagnostic and therapeutic option for DIHO associated with upper mediastinal haematoma or haemothorax, or with symptomatic cardiac compression.

References


