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Spontaneous intramural esophageal hematoma: Complete healing without surgical intervention

Novruzov Namig, MD, PhD[1]
Aynur Safiyeva, MD, PhD[1]
Emin Mammadov, MD[1]

[1] Central Customs Hospital, General Surgery Department, Azerbaijan.

[2] Central Customs Hospital, Gastroenterology Department, Azerbaijan.

[3] Central Customs Hospital, Radiology Department, Azerbaijan.

Correspondence:
Novruzov Namig, MD, PhD
Central Customs Hospital,
General Surgery Department
118, K.Kazimzadeh str. AZ1065,
Baku, Azerbaijan.
Phone: +99450 374 81 22
Email: surgeon.06@mail.ru

We report 6 rare case of spontaneous intramural esophageal hematoma (SIEH) that presented with chest pain which was initially clinically suspected to be due to aortic dissection. The case was diagnosed by endoscopy and multidetector computed tomography. SİEH may represent an intermediate stage between Mallory-Weiss tear and Boerhaave's syndrome. In our experience, computed tomography is very informative as noninvasive examination for an early diagnosis of SIEH and for differensation of aortic and other mediastinal diseases with acute chest pain. Conservative treatment with proton pump inhibitors and observation resulted in complete healing of patients without surgical intervention.

Keywords: Boerhaave's syndrome, spontaneous esophageal intramural hematoma, Mallory-Weiss tear

Introduction

Spontaneous intramural esophageal hematoma (SIEH) is a rare complication that is known as esophageal apoplexy, intramural hemorrhage or intramural dissection in literature. Intramural hematomas can develop in six possible pathogenic causes: hemostasis, emetogenic origin, spontaneous, barotrauma or food trauma, iatrogenic - intravenous catheterization or endoscopic examination, associated with aortic diseases [1, 2, 3].

Material and Methods

In this study, the results of 6 patients with spontaneous intramural esophagus hematoma were evaluated retrospectively.

Patients had complaints of retrosternal pain, dysphagia and hematemesis, depending on esophageal hematoma. 4 of the patients were women and 2 were men. One of the patients after coronary artery bypass surgery and the other patient on cardiological condition after coronal angiography was admitted persistent warfarin. Other patients did not have anamnesis of trauma or anticoagulant use. In one of the women's, a distal esophageal stricture due to achalasia and persistent disturbance resulted hematoma (change the sentence). Three of the patients were transferred to our clinic with Mallory-Weiss's syndrome and others with Esophageal varices bleeding suspicions. Patients were stable in physical, abdominal, hemodynamic, cardiac, and respiratory examinations.

Results

Although initial examination may have doubts about aortic dissection, in radiographically thoracic computed tomography (CT) scan visualized the large intramural hematoma, which formed stenosis by compressing to the lumen of the esophagus. There was no perforation or intramural proliferation in oral contrast tomography (Fig. 1).

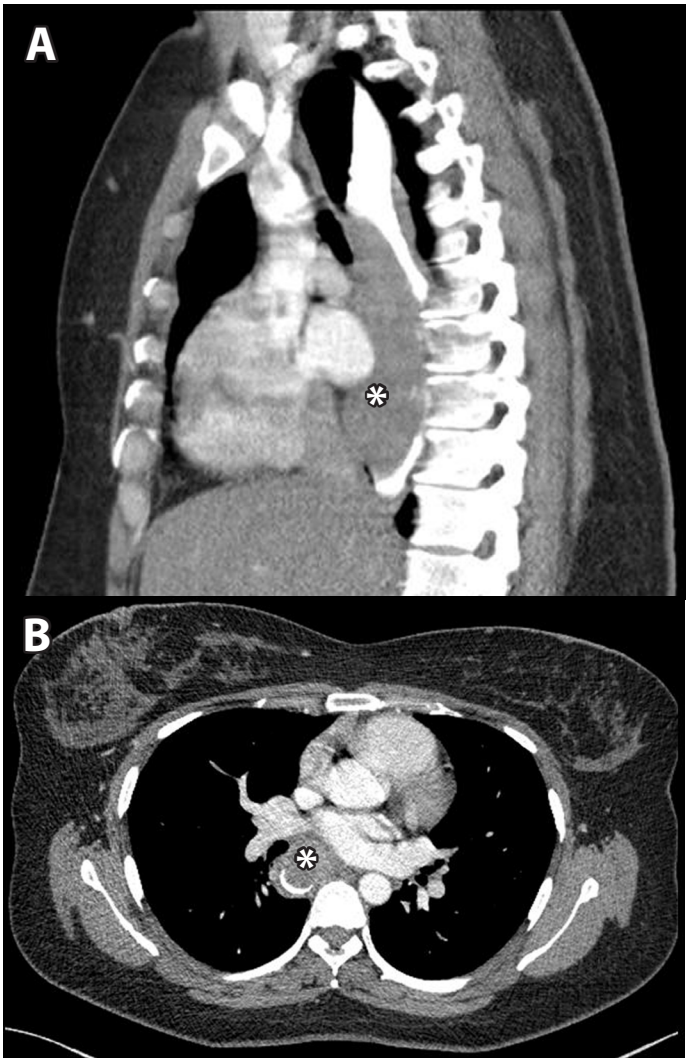

Figure 1.
Sagittal (A) and axial (B) computed tomography (CT) images of the thorax oral administration of contrast medium: large elongated intramural hematoma (star) narrowing esophageal lumen.

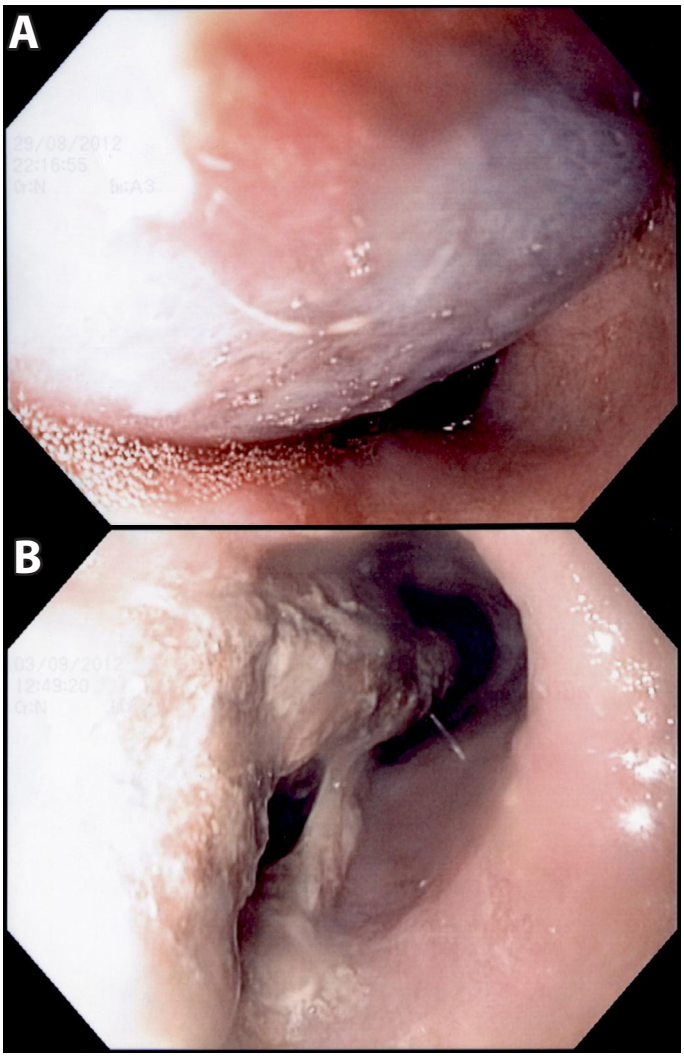

Figure 2.
Endoscopic examination: the obstructing mass of esophagus at initial (A) and 5 days later (B) showed complete resolution of the hematoma.

In an emergency endoscopic examination, the columnar submucosal hematoma was found in two cases at a distance from the cervical esophagus and in four patients from the level of the carina to the lower esophageal sphincter level. All patients were prescribed medical treatment of proton pump inhibitors. The control endoscopic examination was performed 5 or 7 days later, showed the decrease size of hematoma (Fig. 2). Patients were asymptomatic and able to tolerate a complete diet. Resolution of the esophaqeal hematoma was observed radiologically two weeks later.

Discussion

Esophageal damage clinically is being observed as laceration of the mucosa of gastroesophageal junction or cardial part of the stomach - Mallory-Weiss tipping, transmural laceration of all the esophageal walls - Boerhaave syndrome and as spontaneous intramural esophageal hematoma (SIEH). Some authors regard intramural hematoma as moderate congestion between mentioned mucosal and transmural injuries.

Mallory-Weiss syndrome is clinically observed with hematemesis in 30-80% of cases after coughing or large vomiting and endoscopic examination is the first choice for diagnosis [1, 4].

Boerhaave syndrome is classically presented with the Mackler triad:, vomiting, pain in the chest and subcutaneous emphysema [5-7]. Pathogomic radiological signs for esophagus perforation are extravasation of the oral contrast and detection of the free air in the mediastinum or in peritoneal cavity [8, 9].

Intramural esophagus hematoma clinically manifests with retrosternal pain, dysphasia, and hematemesis. Because retrosternal pain is not a spesific symptom for SIEH, it should be differentiated with acute aortic dissection, aortic aneurysm laserization, acute myocardial infarction, peptic ulcer perforation and acute pancreatitis.

Mallory-Weiss syndrome is mainly treated with parenteral nutrition and intravenous analgesics. Boerhaave syndrome require aggressive surgical treatment in the early period as it causes fatal mediastinitis with 10-50% mortality [1, 10, 11].

Conclusion

Computer tomography is very informative as noninvasive examination for an early diagnosis of IEHS and for differensation of dissection of aortic aneurysm and other acute mediastinal pathology. In our experience, early diagnostics with endoscopic and radiological examination, conservative treatment with proton pump inhibitors and observation resulted in complete healing of patients without surgical intervention.

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