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Submucosal hematoma of the esophagus due to fish bone ingestion

Esophageal submucosal hematoma is a rarely observed condition in which abrupt bleeding occurs between the mucosa and muscularis propria of the esophageal wall, often involving a long portion of the esophagus. Possible causes of submucosal hematoma of the esophagus include external trauma, endoscopic sclerotherapy of the esophageal varices, vigorous vomiting, ingestion of a foreign body, complications of esophageal instrumentation (1) or coagulopathy or use of an anticoagulant (2). Submucosal hematomas present as acute substernal or epigastric pain and are typically accompanied by dysphagia or hematemesis. Diagnosis requires an endoscopy with a small-diameter ultrasonic probe and chest computed tomography (CT) (3).

Cases of submucosal hematoma of the esophagus have been reported by several authors (4-6). However, to our knowledge, cases of submucosal hematoma of the esophagus caused by the ingestion of a fish bone have rarely been reported in the literature (7). Therefore, we wanted to present this rare disorder.

A 60-year-old woman was admitted to the emergency department of our hospital for severe chest pain, odynophagia, and hematemesis after eating fish. There was no history of any diseases. On admission, the patient's blood pressure, body temperature and pulse rate were 100/60 mm Hg, 36.2°C and 92/min, respectively. On physical examination, she presented with a medium general status. There were no abnormal cardiopulmonary findings. No tenderness, rebound tenderness or guarding was observed in the abdomen. The liver and spleen were not palpable. The patient was hospitalized.

Electrocardiography showed that sinus rhythms and chest X-rays were normal. Endoscopic examination of the esophagus revealed a submucosal hematoma in the esophagus that was approximately 20 cm distal to the incisor teeth. It was mainly in the posterior left wall and extended from the cervical esophagus to the esophagogastric junction. Blood was seeping from certain portions of the hematoma (Figure 1).

Figure 1. Endoscopic examination of the esophagus revealed a submucosal hematoma in the esophagus approximately 20 cm distal to the incisor teeth. It was mainly in the posterior left wall and extended from the cervical esophagus to the esophagogastric junction. Blood was seeping from several portions.

Upon complete blood count analysis, hemoglobin, leukocyte and platelet counts were within normal ranges. The prothrombin time was 12.7 seconds, and C Reactive Protein was normal. The erythrocyte sedimentation rate was also normal. Serum glucose, transaminases, creatinine, and urea levels were within normal ranges. Serum sodium, potassium and phosphorus were within normal ranges.

The patient was treated with intravenous alimentation, antibiotics and acid suppression therapy. The patient's clinical manifestations moderately improved during the follow-up examinations.

A repeat endoscopy performed 12 days later showed complete resolution of the esophageal lesions (Figure 2), and she began eating on the same day. There were no marked changes in course after she started eating, and she was discharged from the hospital on day 13. The patient is still being followed.

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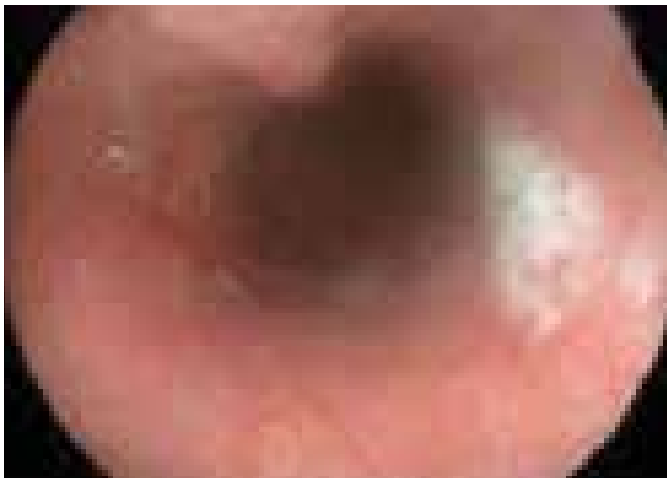

Figure 2. A repeat endoscopy performed 12 days later showed complete resolution of the esophageal lesions.

It is also known as esophageal hematoma or intramural esophageal hematoma, and it is considered a form of esophageal injury. According to several authors (8,9), esophageal injury may be divided broadly into mechanical and chemical injuries.

Most reported cases of esophageal hematoma occur in women. It has been reported that esophageal hematoma is associated with coagulopathy (10) and variceal injection sclerotherapy (11). It has also been known to occur spontaneously in healthy people (12). Elderly patients who have intrinsic coagulopathies or who are taking anticoagulant or antiplatelet medication are at higher risk for the condition. Esophageal hematoma usually presents as a sudden onset of chest pain followed by odynophagia, dysphagia, and mild hematemesis.

Several authors have reported cases of submucosal hematoma of the esophagus (4-6). However, to our knowledge, submucosal hematoma of the esophagus caused by ingestion of a fish bone has only been described once in the literature (7). In the present case, esophageal submucosal hematoma was diagnosed using an upper endoscopy. The patient was hospitalized, oral intake was stopped, and medical treatment was given.

Diagnosis can be made through several means. A chest CT demonstrates a diffusely thickened esophagus, and sometimes a "double barrel" appearance and obliteration of the esophageal lumen (3). Endoscopically, obliteration of the esophageal lumen is observed through the visualization of a long, deep, friable, blue submucosal mass with or without a visible tear (13). Sometimes it may be difficult to distinguish a hematoma from an esophageal malignancy (14).

The mainstay of treatment is to maintain the patient without oral intake and to monitor the patient's hemodynamic status, and it usually takes several weeks for the patient to heal completely. Progress is monitored by repeated CT or endoscopy at one-week intervals. The treatment is conservative and results in resolution of the hematoma and a return to normal swallowing. Most patients make a full recovery, and surgical intervention is rare.

In conclusion, submucosal hematoma of the esophagus is a rare disorder that has different predisposing factors. However, our case shows that submucosal hematoma of the esophagus can occur due to ingestion of a foreign body, such as a fish bone. This rare disorder should be considered in patients presenting with sudden onset retrosternal pain associated with dysphagia and hematemesis, and they should be examined by esophagoscopy for evidence of this disorder.

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