

Hematemesis: A Rare Presentation of Esophageal Tuberculosis

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Citation

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Abstract

Tuberculosis is one of the common infectious diseases in developing country, commonly affecting the gastrointestinal tract. Esophageal tuberculosis is rare which presents commonly with dysphagia. We discuss a patient who presented with hematemesis diagnosed to have tuberculosis of esophagus and was treated successfully.

INTRODUCTION

Esophageal tuberculosis (ETB) is rare and usually presents with dysphasia, retro-sternal pain and constitutional symptoms. Presentation in form of hematemesis, fistula formation or perforation is rare. We present a case of esophageal tuberculosis presenting with hematemesis.

CASE REPORT

An 18 year old male presented to emergency with three bouts of hematemesis. He had no history of malena, ingestion of ulcerogenic drugs or addictions. He had no past history of tuberculosis. On examination, patient was hemodynamically stable, and his abdominal findings were insignificant. Patient was resuscitated and fiberoptic gastroduodenoscopy (EGD) was performed which revealed and elongated ulcer at 28 centimeter from the incisors. (Figure1) Rest of the esophagus, stomach, and duodenum were normal. Patient underwent computerised tomography (CT scan) of the thorax which revealed thickening of the mid-esophagus with a necrotic lymph node in vicinity. The lung fields were normal. (Figure2) An Endoscopic ultrasound (EUS) was done which confirmed the presence of necrotic lymph node. EUS guided biopsy which revealed epitheloid granulomas with lymphocytic infiltrate suggestive of tuberculosis. Polymerase chain reaction of the tissue was highly specific for mycobacterium tuberculosis. Patient was started on 4 drug anti-tubercular treatment. Patient responded to the treatment and was asymptomatic later. Repeat EGD after 9 months showed complete resolution of the esophageal ulcer and lymph node on CT scan.

Figure 1

Figure 1: Endoscopic photograph of the esophagus showing a linear mucosal ulceration.



Figure 2

Figure 2: CT scan of the thorax showing thickening of the esophagus with adjacent lymph node with central necrosis.

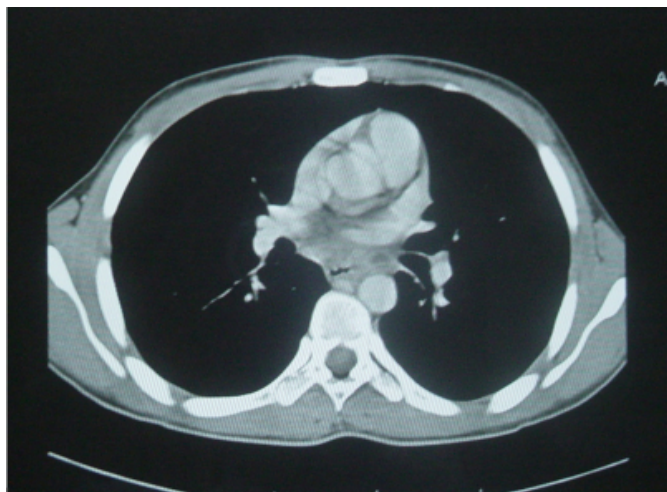
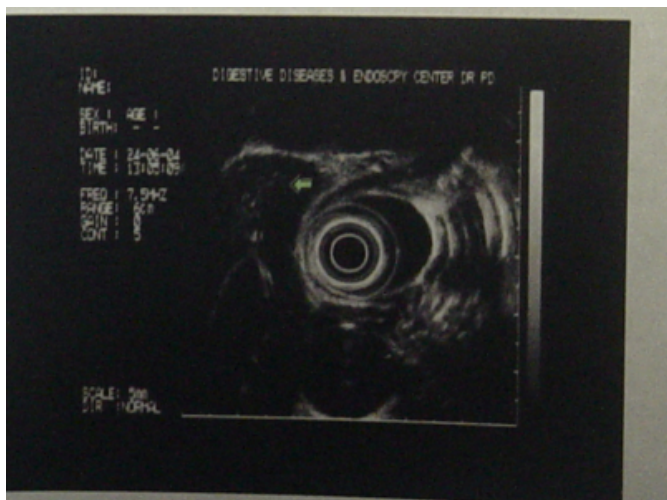


Figure 3

Figure 3: Photograph of the endoscopic ultrasound showing a necrotic lymph node in vicinity of the wall of the esophagus with irregular mucosa of the esophagus.



DISCUSSION

Tuberculosis commonly affects the entire gastrointestinal tract, esophagus being least involved with an incidence of 0.14%.¹ The squamous epithelium, peristalsis, mucus and saliva have been protective mechanisms. In primary esophageal tuberculosis, no other foci of tuberculosis are found, however most are secondary which occurs due to swallowed infected sputum, direct involvement from the lungs, mediastinal lymph nodes or retrograde lymphatic or hematogenous spread.² Common site of tubercular involvement is mid- esophagus, near carina due to proximity to mediastinal lymph nodes.²

Esophageal tuberculosis presents commonly with dysphagia, cough, chest pain in addition to fever and weight loss, which might simulate esophageal malignancy. Rare complications as bleeding, perforation have been reported.¹ Aorto-esophageal fistula with profound hematemesis have been reported.³ Presentation as submucosal tumor have reported by Huang et al.⁴

Diagnosis of esophageal tuberculosis is difficult and a high index of suspicion is required. Esophageal TB should be suspected in patients with pulmonary or systemic tuberculosis who develop dysphagia or odynophagia.¹ Plain radiography of the chest, CT scan would reveal any of the pulmonary or mediastinal lymph node involvement. Endoscopy is valuable to diagnose the lesion and for achieving biopsy for histopathology.² These lesions can be hypertrophic, granular or ulcerative.⁵ Endoscopic mucosal biopsy has sensitivity of 22% as reported by Mokoena et al.⁶ ELISA testing for gastrointestinal tract TB has been 80% sensitive as reported by Anand et al.⁷ Anti-tubercular chemotherapy is the main stay in the treatment, however surgical intervention is warranted if bleeding persists or gets complicated with perforation or fistula formation occur.

Our patient presented with hematemesis and was diagnosed as tubercular infection of the esophagus confirmed with histopathology and polymerase chain reaction and was treated successfully with conservative method.

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References

1. Sood A, Sood N, Kumar R, Midda V. Primary tuberculosis of esophagus. *Indian J Gastroenterol.* 1996; 15: 75.
2. Gordon AH, Marshall JB. Esophageal tuberculosis; Definitive diagnosis by endoscopy. *Am J Gastroenterol.* 1990; 85: 174-7.
3. Iwamoto I, Tomita Y, Takasaki M, Mine K, Koga Y, Nabeshima K, Takechi Y. Esophagoaortic fistula caused by esophageal tuberculosis: report of a case. *Surg Today.* 1995; 25(4):381-4.
4. Yao-Kuang Huang, Yi-Cheng Wu, Yun-Hen Liu, Hui-Ping Liu. Esophageal tuberculosis mimicking submucosal tumor. *Interactive cardiovascular and thoracic Surgery* 2004;

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3: 274-276.

5. Fahmy AR, Guindi R, Farid A. Tuberculosis of esophagus. *Thorax* 1992; 24: 254-256.

6. Mokoena T, Shama DM, Ngakane H, Bryer JB. Esophageal Tuberculosis: A review of eleven cases.

Postgrad Med J. 1992; 68:110.

7. Anand BS, Schneider FE, El-Zaatari FA. Diagnosis of esophageal tuberculosis by polymerase chain reaction on endoscopic biopsy specimen. *Am J Gastroenterol.* 1994; 89: 2248-2249.

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