



Oesophageal Tuberculosis - Rare case series report

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Abstract :

Introduction. The rarest form of G.I.T. Tuberculosis is Oesophageal Tuberculosis. It can present as primary or secondary forms. Incidence of primary and secondary Tuberculosis accounts for 0.15 and 0.14 respectively. Its clinical presentation is easily confused with that of Malignancy. Oesophageal TB usually cured with ATT without sequelae even in the presence of tracheoesophageal fistula. Here we report 2 cases of oesophageal tuberculosis Case 1 - 46yr old female presented with Dysphagia Grade 2 of one month duration along with history of food held up in chest. Chest Xray and CT chest - Normal study. UGI Scopy revealed eccentrically placed large excavating ulcer with overhanging edges at 22cm of oesophagus. Biopsy revealed epithelioid granuloma and caseating necrosis suggestive of tuberculosis. Case 2 - 28yrs old female presented with Dysphagia Gr1-2 of 15days duration which was progressive in nature associated with retrosternal discomfort. OGD revealed globular eccentrically placed submucosal lesion at 25cm

with superficial ulceration on endoscopy. CT chest showed Hypodense subcarinal mass, possible a nodal mass involving the oesophageal wall. EUS guided FNAC from lesion showed features suggestive of tuberculosis. Both the Patients were put on ATT for 6 months and their symptoms improved well with treatment. Conclusion Oesophageal Tuberculosis though its a rare entity could have many fold presentation like ulceration, stricture, and a differential diagnosis of tuberculosis to be kept in mind in any ulcerovegetative lesions of Oesophagus and ATT should be considered earliest.

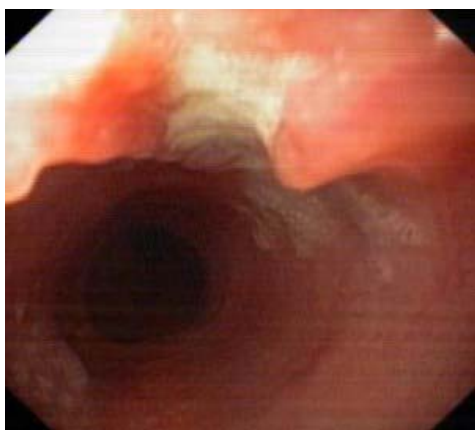
Keyword : Key words Tuberculosis, Oesophageal Tuberculosis, Dysphagia.

Introduction :

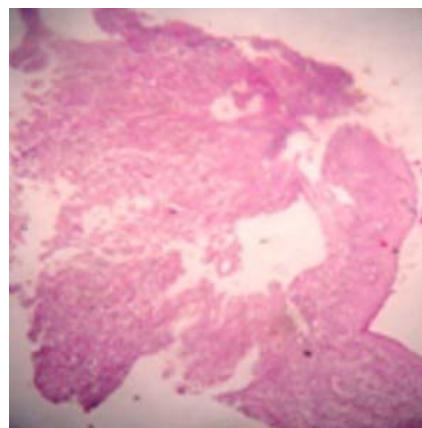
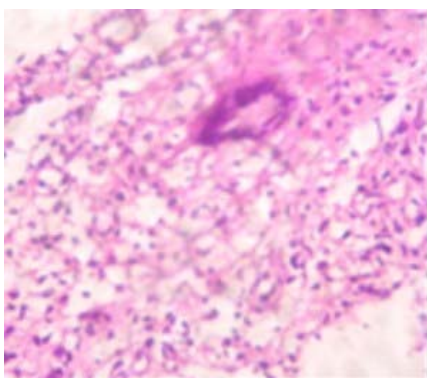
Oesophageal TB is a rare cause of G.I. Tuberculosis, presenting as primary (0.15%) or secondary (0.14%) forms. Its clinical presentation mimics malignancy. Oesophageal TB is usually cured with ATT without sequelae even in the presence of tracheoesophageal fistula. Here we report 2 cases of Oesophageal tuberculosis, one with positive biopsy

findings and another with interesting EUS findings and positive nodal FNA

Case 1: 46 yr old female presented with Grade 2 Dysphagia of 1 month, insidious in onset and progressive in nature. She also had hold up of food in the chest with no h/o chest pain, regurgitation and aspiration. Patient was not diabetic and her HIV status is negative. Chest X ray and CT chest were normal. UGI scopy (Fig1) revealed an eccentrically placed, large excavating ulcer with overhanging edges at 22cm from incisor teeth. Biopsy revealed epithelioid granuloma and caseating necrosis suggestive



Endoscopic view of the esophageal ulcer in case 1 Photo micrograph of esophageal ulcer - H & E stain- Low power view Photo micrograph of esophageal ulcer - H & E stain- High power view



Case 2: 28yrs old female presented with Gr-2 dysphagia of 15 days, insidious in onset, progressive in nature and associated with retrosternal discomfort. Patient was a known case of GERD, hence peptic stricture was suspected. Patient was not diabetic and her HIV status is negative. OGD (Fig 4) revealed a globular eccentrically placed submucosal lesion at 25cm with superficial ulceration. CT chest (Fig 5) showed a hypodense subcarinal mass, possible a nodal mass involving the oesophageal wall. **EUS guided** FNAC (fig6) taken from submucosal lesion showed strong clusters of epithelioid granulomatosis admixed with multinucleate Langhans giant cells suggestive of Tuberculosis. (Fig. 7,8)



Endoscopic view of esophageal lesion in case 2 CT scan of chest showing nodal mass in case 2 EUS showing the esophageal lesion in case 2 Photo micrograph of the esophageal lesion - H &E stain - Low power view

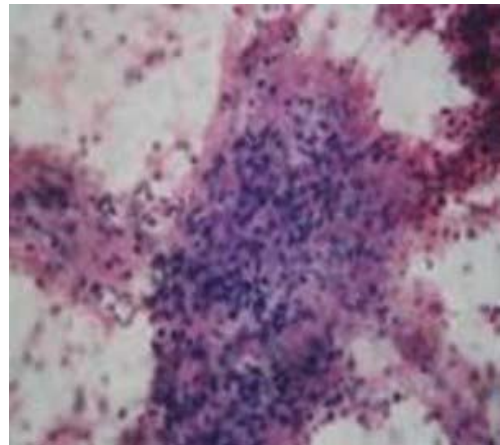
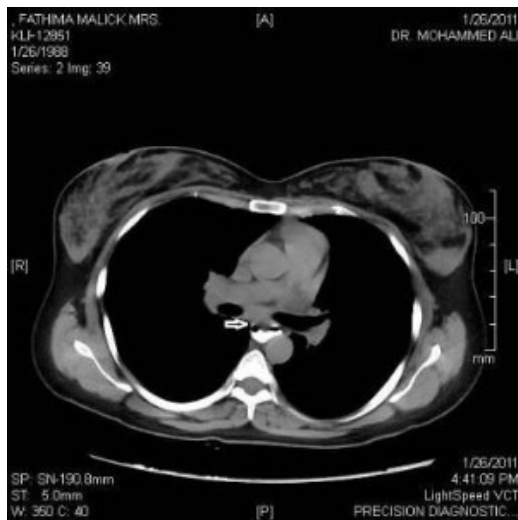
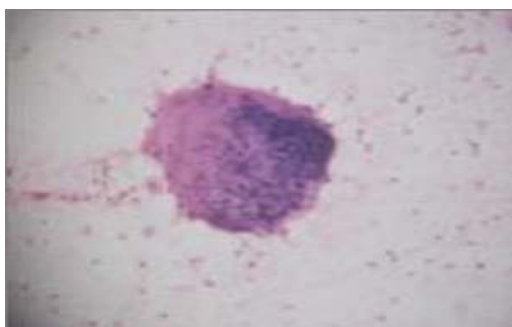
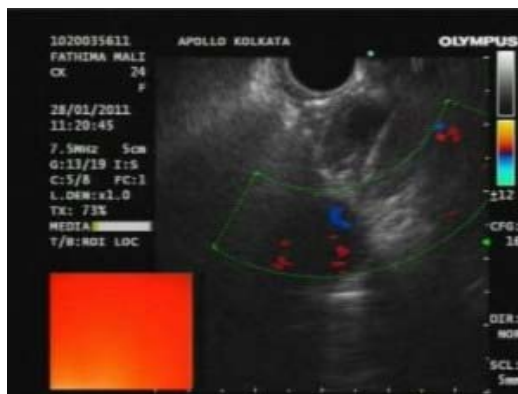


Photo micrograph of the esophageal lesion - H & E stain- High power view

Both the patients were put on Anti tuberculosis drugs (INH 300mg +Rifampicin 600mg +Ethambutal 800mg + Pyrazinamide 1.5g) for 6months and the patients were followed for 6months. At the end of six months, their symptoms improved well with the treatment and in endoscopy, the lesions had healed.



Discussion :

Oesophageal tuberculosis (ET) is extremely rare, even in countries which have a high incidence of tuberculosis⁽¹⁾, differentiating Oesophageal tuberculosis from carcinoma is very difficult and may result in an unnecessary esophagectomy⁽⁴⁾. Reason is that the isolation of tubercle bacilli and caseous necrosis, is difficult⁽⁵⁾. Oesophageal tuberculosis occurs in three forms: ulcerative, hypertrophic and granular.⁽³⁾ The most common form is tubercular ulcer, which has an irregular outline, a greyish base and irregularly infiltrated edges. When oesophageal tuberculosis presents

in the form of a tumour like growth with stricture, it is most easily mistaken for carcinoma. The common site of oesophageal involvement is in the mid oesophagus near the bifurcation of the trachea due to close proximity of the mediastinal lymph nodes. Tuberculous mediastinitis affects the oesophagus by the effect of pressure, adhesions or by actual rupture of caseous peribronchial lymph nodes with subsequent fistula formation.⁽⁷⁾

The main clinical presentation of Oesophageal tuberculosis is dysphagia.⁽⁶⁾ Patients with Oesophageal tuberculosis may also suffer from odynophagia, weight loss or retrosternal pain. It rarely presents with hematemesis and malena.⁽⁸⁾ Primary Oesophageal tuberculosis is very rare and oesophageal involvement of tuberculosis usually results from direct extension from adjacent mediastinal or hilar lymph nodes, reactivated lung infection, infected vertebral bodies or aortic aneurysms.⁽⁵⁾

The most common endoscopic finding of Oesophageal tuberculosis is the ulcerative form.⁽²⁾ The ulcers of Oesophageal tuberculosis usually have a shallow, smooth border with a gray purulent base and irregularly infiltrated edges.^(9,10) In one study with eight Oesophageal tuberculosis cases, linear ulcers was seen in six cases.⁽¹¹⁾ In our case Upper G.I. endoscopy showed submucosal lesion with superficial ulceration.

To conclude Oesophageal Tuberculosis though rare entity has a varied presentation. It presents as a stricture either benign or malignant, TOF or as G.I bleed and a differential diagnosis of tuberculosis to be kept in mind in a tropical country like ours. ATT given to these patients gave excellent results and we were able to demonstrate positive EUS guided nodal FNA.

REFERENCES :

- 1) Sinha SN, Tesar P, Seta W, et al. Primary esophageal tuberculosis. Br J Clin Pract 1988; 42: 391
- 2) Savage PE, Grundy A. Esophageal tuberculosis: an unusual cause of dysphagia. Br J Radiol 1984; 57: 1153-5..
- 3) Gupta SP, Arora A, Bhargava DK. An unusual presentation of esophageal tuberculosis. Tuberc Lung Dis 1992; 73: 174-.
- 4) Prakash K, Kuruvilla K, Lekha V, et al. Primary tuberculous stricture of the esophagus mimicking carcinoma. Tropical Gastroenterology 2001; 22: 143
- 5) Nagi B, Lal A, Kochhar R, et al. Imaging of esophageal tuberculosis: a review of 23 cases. Acta Radiol 2003; 44: 329-33
- 6) Gupta NM, Goenka MK, Vaiphei K, et al. Isolated esophageal tuberculosis. Indian J Gastroenterol 1995; 14: 25
- 7) Iwamoto I, Tomita Y, Takasaki M, et al. Esophagoaortic fistula caused by esophageal tuberculosis. Surg Today 1995; 25: 381-4.
- 8) Newman RM, Fleshner PR, Lajam FE, et al. Esophageal tuberculosis: a rare presentation with hematemesis. Am J Gastroenterol 1991; 86: 751-5.
- 9) Jain S, Kumar N, Das DK, et al. Esophageal tuberculosis. Endoscopic cytology as a diagnostic tool. Acta Cytol 1999; 43: 1085-90

10) Khan R, Abid S, Jafri W, Abbas Z, Hameed K, Ahmad Z. Diagnostic dilemma of abdominal tuberculosis in non-HIV patients: an ongoing challenge for physicians. World J Gastroenterol 2006; 12:6371-6375.

11) Rosario MT, Raso CL, Comer GM. Esophageal tuberculosis. Dig Dis Sci 1989; 34: 1281-4.