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DYSPHAGIA AS AN UNUSUAL PRESENTATION OF PEDIATRIC EXTRAPULMONARY TUBERCULOSIS : A CASE REPORT

Paediatric Medicine

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ABSTRACT

We report the case of an immune-competent 13 year old child with symptoms of dysphagia secondary to esophageal ulcers of tubercular origin. Gastrointestinal involvement from Mycobacterium tuberculosis is rare.. The most frequently affected sites are the terminal ileum and the peritoneum. Esophageal tuberculosis is rare and is usually secondary to extension from neighboring infected organs such as the mediastinal nodes and/or the bronchi. Clinical, endoscopic and radiological pictures of the esophageal disease often mimic malignancy. In spite of the rare nature of the disease,it can be managed effectively with anti TB treatment (ATT) to avoid complications.

KEYWORDS

Esophageal Tuberculosis, Dysphagia, Rare

OBJECTIVE

Extra pulmonary tuberculosis represents 37% of all tuberculosis (TB) in paediatric age groups.[1] The involvement of the digestive tract is dominated by ileocecal region and peritoneum . Esophageal TB is a rare condition and it constitutes 0.3-2.8% of all gastrointestinal TB cases in adults.[2] It's occurrence in paediatric population is very rare. It may occur in isolation or as a part of disseminated TB. It was first described as postmortem diagnosis by Denonvilliers in 1837.[3] Tuberculosis can involve any part of GIT, although the terminal ileum, caecum and the peritoneum are common sites.[4] We present one case report of a 13 year old male child who was diagnosed as a case of esophageal TB in order to uncover rare presentation, diagnosis and outcome in management of this disease at tertiary level hospital.

Case Presentation

A 13-year-old male patient presented with high-grade fever ,difficulty in swallowing ,significant weight loss and increased salivation with school absenteeism since last 2 months. There was no family history of TB. Developmental milestones and immunization were normal for age.

Physical examination revealed weight- 25kg(<3rd percentile), height-135 cm(<3rd percentile) and a BMI of 13.72(3rd–5thcentile), suggesting growth failure. BCG scar was absent, There was firm, matted,non-tender and significant bilateral anterior cervical lymphadenopathy. Dribbling of thick, viscid saliva in oral cavity. No abnormality was observed in examination of abdomen, respiratory tract and nervous system.

Complete blood count:

Hemoglobin- 8.8 g/dl, Total leucocyte count- 18,740/cumm ,N-84 L-10 M-5 E-1, Platelet count- 2.54 lakh/cumm, Liver function test: SGOT-93.9, SGPT-54, ALP-128, ESR : 25mm at end of 1st hour, CRP: 24 mg/L, Tuberculin test: Negative,Viral Markers: Negative, HIV: Negative, Blood Culture- No Growth, **Throat Swab:** No organism detected, **CBNAAT Sputum:** Negative**, Sputum for AFB :** Negative **Lymph node aspirate for HPE after FNAC** :Areas of necrosis,caseating granuloma, epitheloid cells,multinucleated giant cells suggest granulomatous lesion

UGI endoscopy:

Diffuse pharyngeal ulceration and greyish white nodular lesions with adjoining ulceration in middle one-third of esophagus.

Esophageal tissue biopsy:

Ill formed granulomas composed of epitheloid histiocytes and mature lymphocytes.

CECT CHEST:

Pretracheal,paratracheal & subcarinal lymphadenopathy seen.ATT was commenced as per Childhood TB guidelines as mentioned by NTEP, GOI and IAP by initiating 2HRZE + 4HRE. Patient was afebrile after 4 weeks of ATT intensive phase and complete symptomatic remission with weight gain was observed during continuation phase.

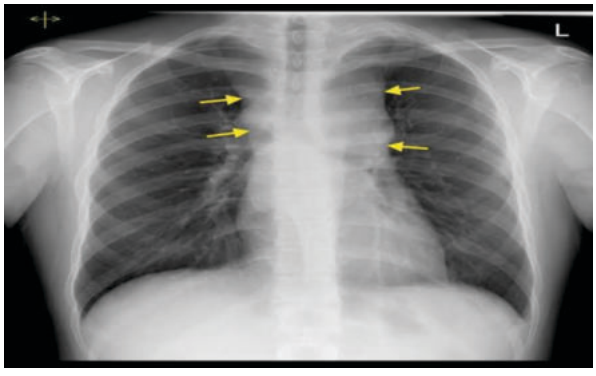

Figure 1. Chest X-ray showing mediastinum widening

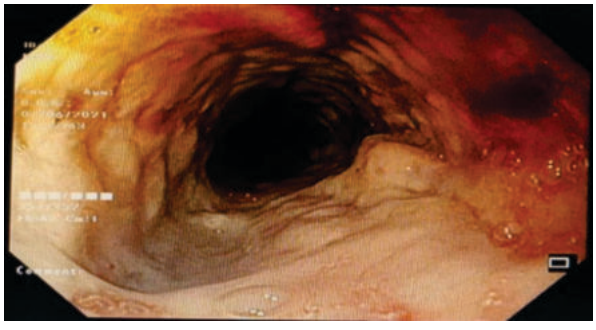

Figure 2: Gastroesophagoduodenoscopy showing mucosal ulcerations with nodularity in middle 1/3rd of the esophagus

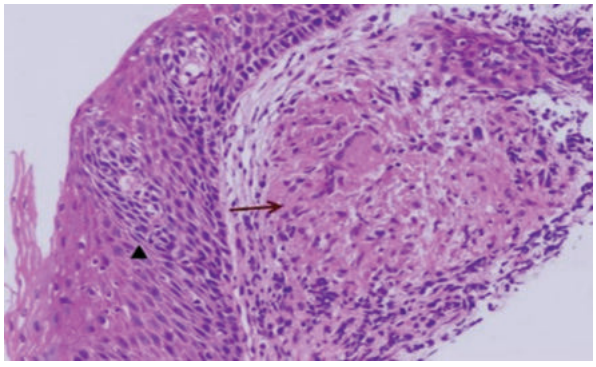

Figure 3. Photomicrograph showing caseating granulomas

DISCUSSION

Esophageal TB is a rare entity. Esophageal tubercular involvement may be primary or secondary. Primary esophageal TB is extremely rare. Secondary esophageal TB is more common and is primarily the secondary involvement of esophagus due to an adjacent mediastinal lymph node,

pulmonary parenchyma or vertebral column involvement. Our patient had mediastinal lymphadenopathy as was detected in the contrast CT of chest which also explains the occurrence of TB lesions in the corresponding middle third segment of esophagus. Availability of endoscopic ultrasound has, however, obviated the need of contrast CT scans and resultant radiation exposure.

Dysphagia is the most common symptom. On UGI endoscopy, the esophageal TB lesions are are mainly ulcerative and are commonly observed in its middle one-third segment.

However, in our case, the lesions were mainly nodular with sparse ulcerations. The differential diagnosis of esophageal TB includes Crohn´s disease, actinomycosis and esophageal injury secondary to the ingestion of caustic material. Complications of esophageal TB, though rarely observed, may include perforation, strictures and fistula formation. Most of the patients, especially those without complications, respond to the standard 6 month ATT comprising of 2 HRZE in intensive phase followed by 4 HRE in the continuation phase as observed. However patients with longstanding fistulous complications epithelize and may require surgical intervention along with ATT.

CONCLUSION

The involvement of the esophagus in TB is uncommon. Dysphagia is the most common symptom of esophageal TB. It is therefore important to recognize and include this entity in the differential diagnosis of patients with dysphagia particularly in countries with high incidence of TB.

To the best of our knowledge, this is the rst report of ANEC secondary to dengue infection with a very fulminant course. With the passage of time and more awareness, the outcome of ANEC is improving but it The involvement of the esophagus in TB is uncommon. Dysphagia is the most common symptom of esophageal TB. It is therefore important to recognize and include this entity in the differential diagnosis of patients with dysphagia particularly in countries with high incidence of TB.

REFERENCES

1. Kaba O et al .Evaluation of cases of pediatric extrapulmonary tuberculosis:a single center experience. Turk Pediatri Ars.2019;54(2):86-92
2. Changal KH et al Esophageal tuberculosis; a rare cause of odynophagia: a case report. Egyptian Journal of Chest Diseases and Tuberculosis. 2013 April;62(2): 349-51
3. Rövekamp BT, Linde KVD, Dees J, Overbeek SE, Blankenstein MV, Kuipers EJ.Solitary tuberculous ulcer in the oesophagus. Eur J Gastroenterol & Hepatol 2005;17:435-439.
4. Werbeloff L, Novis BH, Bank S, et al, The radiology of tuberculosis of the gastrointestinal tract. Br J Radiol 1973;46:329-36.