

A rare clinical Presentation of TB

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Abstract

Tuberculosis(TB) is a multi-organ disease. The most common manifestation is a pulmonary disease, but involvement of the gastrointestinal tract is not uncommon with the ileocaecal region being the commonest site. But ileal perforation due to tuberculosis is a rare manifestation. Here, we report a case of ileal tuberculosis presenting as perforated viscus while on treatment for genitourinary tuberculosis. Though, perforation of ileal tuberculosis is rare, it should be considered as a possibility when patients present with features of perforated viscus, particularly in patients who are diagnosed or suspected of tuberculosis.

Introduction

Tuberculosis, also known as Koch's disease is a common infectious disease which can affect several organs of the body and is caused by the bacteria, *Mycobacterium tuberculosis*. Tuberculosis most commonly affects lungs¹². Extra pulmonary tuberculosis usually affects children and immunocompromised adults. Commonly affected extra pulmonary organs are pleura, central nervous system, bones, joints, intestines and genitourinary system. In people with extremely poor immune function a widespread variety of extra pulmonary tuberculosis may emerge. This condition is known as miliary tuberculosis and affects about 10% of the patients suffering from extra pulmonary tuberculosis^{3,4}.

Case report

A 57-year-old man presented with persistent orchitis of left testis which was not resolving with conventional antibiotic treatment for more than 3 months. He underwent orchidectomy in view of excluding malignancy and the histological assessment confirmed tuberculous orchitis. He also had persistently elevated ESR and miliary mottling in chest x-ray (CXR). But Mantoux test and sputum acid fast bacilli(AFB) were negative. He was treated with anti TB drugs under the category of extra pulmonary TB. He developed a cold abscess in right axilla, 2 months after starting anti TB regimen. Both PCR for TB and AFB culture of the aspirated fluid were positive. While on treatment he presented with acute abdomen with features of

peritonitis and the erect chest x-ray revealed air under diaphragm. An explorative laparotomy was performed and an ileal perforation was identified. Resection of the involved segment and anastomosis was done. Histology of the resected ileum was not conclusive of TB but showed granulomatous inflammation. On the other hand, the clinical features and investigations including SAT were not in favour of a perforated typhoid ulcer which is fairly a common cause of ileal perforation. Anti TB treatment was converted to the multidrug resistant TB category.

Discussion

Genitourinary TB

The prevalence of genital tuberculosis in males is reported to be about 0.43-15% in a number of studies spanning over half a century^{5,6,7}. Extra-genital tuberculous disease including renal involvement is present in majority (88%) of these patients⁸. Tuberculous infections of the genital tract are likely to be due to secondary blood borne spread from a primary pulmonary lesion^{9,10}. This haematogenous spread results in genital lesions with or without any renal lesions. Genital disease may arise by antegrade infection from the kidneys¹¹ as hypothesized by a post-mortem study of autopsy findings in patients with genitourinary disease. It revealed an incidence of 13% of epididymal disease in patients with miliary renal disease as compared to an incidence of 52% and 100% epididymal disease in patients with caseous and cavitory renal disease respectively. Local symptoms of the disease are usually insidious and progressive, which can be confused with other infections, cysts and tumours. Occasionally abscess or scrotal sinus formation is also present. The diagnosis is based on clinical suspicion followed by confirmation with histopathological evidence by biopsy. Fine needle aspiration cytology (FNAC) has been used for successful diagnosis in many settings¹². After the introduction of rifampicin and pyrazinamide, the short course chemotherapy of six months duration was introduced to treat genitourinary tuberculosis. Surgery was indicated only if there was lack of clinical response in the form of increase in size of swelling or abscess formation¹³.

Cold abscess

Cold abscess is the severe form of tuberculous lymphadenitis which is a fairly common

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presentation in children¹⁴. Management includes aspirating the pus and sending for smears and culture, and treating with anti TB drugs under the category of disseminated TB. Incision and drainage of these abscesses may end up in chronic discharging sinuses.

Intestinal TB

Intestinal TB is not an uncommon presentation. It mainly affects the ileum and caecum. But ileal

perforation due to TB is a rare manifestation and there are only few cases reported in the literature¹⁶. On the other hand Typhoid is a common aetiology for ileal perforation. The Management includes explorative laparotomy, resection and repair of the affected segment, and treating as extra pulmonary TB¹⁵. Histology of the resected segment revealing caseous granulomatous inflammation is confirmatory of intestinal TB¹⁶.

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