

An Unusual Case of Isolated Tubercular Splenic Abscess Treated with Anti Tubercular Drugs

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Introduction

Tuberculosis isolated to the spleen is a rare clinical entity particularly in the non-HIV positive patient population [1]. As symptoms are poorly specific, delay in diagnosis is not uncommon, particularly in the absence of disease elsewhere in body. No laboratory investigation is diagnostic of tuberculosis specially when it is not disseminated [2]. Polymerase chain reaction (PCR) of the aspirated pus is an effective method of diagnosis of extra-pulmonary tuberculosis [3]. Here, we underline the diagnostic difficulties and controversies regarding its treatment essentially related to the rarity of this condition.

Methods and Results

A 20 year male presented with pain in the left flank, weight loss and on and off low grade continuous fever since 3 weeks. Physical examination was unremarkable and routine blood investigations (including: Liver and renal function tests) were normal except raised ESR (70mm at first hour) and positive Mantoux test (14mm induration after 48 hours). A large splenic abscess of approximately 4 cm x 4 cm was diagnosed on CT scan of abdomen. (Fig. 1) The abscess was drained under CT guidance and about 90 ml of hemorrhagic fluid was aspirated and sent for Pus Culture and sensitivity (C/S). The growth was reported as *Acinetobacter*. Despite Intravenous antibiotics as per the C/S, no improvement was seen clinically and radiologically even after 72 hours, thus the rare diagnosis of splenic tuberculosis was suspected and pus was sent for

PCR for TB and culture of tubercular bacilli. The PCR report was Positive for mycobacterium TB. Hence the diagnosis of Tubercular Splenic Abscess was made and extensive search was made for any other focus of TB in body by repeating the radiograph of chest, ultrasound of the abdomen, enteroclysis, and barium studies but no tubercular lesion was detected elsewhere. The patient was given standard 5 drugs Anti tubercular regimen (ATT) and clinical improvement was observed within a week and splenectomy was not required. The temperature returned to normal and pain subsided in 3 days and patient was discharged 5 days later on antitubercular treatment. After 4 weeks culture also shown growth of mycobacterium tuberculosis in the splenic abscess. ATT was continued for 9 months. Follow up ultrasound at 6 months showed complete resolution of the abscesses. At last follow up patient is doing well after the completion of drug therapy.



Fig. 1: CT scan shows guided drainage of large splenic abscess.

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Comments

The isolated splenic tuberculosis is very rare and the diagnostic and treatment modalities are not standardized. Though the classical treatment of tubercular splenic abscess is splenectomy [4] but our experience with this case suggests that these patients can also be treated with anti tubercular therapy only without splenectomy, if diagnosis is made before hand.

Although splenomegaly and anaemia are common, symptoms of this disease are not Specific [5] and high index of suspicion is required to diagnose this rare entity without splenectomy. In the present case ultrasonographic features were suggestive of splenic abscess, but the failure of response to culture sensitive antibiotics clinch the diagnosis towards uncommon causes, i.e. tuberculosis. Although the diagnosis of extrapulmonary tuberculosis is difficult. Polymerase chain reaction (PCR) assay showed high specificity (95%) for the diagnosis of intestinal and visceral tuberculosis [5] and can diagnose it without splenectomy or percutaneous biopsy.

The possible ways of involvement of the spleen in tuberculosis may be (i) miliary tuberculosis (ii) generalised caseating tuberculous lymphadenitis and (iii) acute non-reactive haematogenous tuberculosis. Although splenic tuberculosis is rare at the present time, it should be included in the differential diagnosis of fever of unknown origin with

or without splenomegaly and unresolved splenic abscess. Regardless of immune status, splenic TB should be considered as a diagnostic possibility when dealing with the solitary nodules/ abscess of the spleen.

References

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