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Case Report

Isolated primary tubercular splenic abscess: a case report

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ABSTRACT

Splenic abscess is a rare condition, with tubercular splenic abscess being even rarer and associated with high mortality if untreated. This case report describes a young male presenting with a 3-month history of intermittent fever, left upper abdominal pain, and generalized weakness. After detailed clinical and radiological examination ultrasonography (USG) - guided pigtail catheter drainage was performed, and pus analysis revealed elevated adenosine deaminase (ADA) levels (322 IU/) and acid-fast bacillus (AFB) positivity. The patient showed significant clinical improvement within 10 days after ATT initiation. This case highlights the rarity of primary tubercular splenic abscess in immunocompetent individuals and underscores the efficacy of minimally invasive drainage combined with anti-tubercular therapy as an alternative to splenectomy. Tuberculosis should be considered in the differential diagnosis of splenic abscess, and a thorough diagnostic workup is essential for optimal management.

Keywords: Splenic abscess, Minimally invasive drainage, Ultrasound-guided pigtail catheter, Splenectomy alternative, Percutaneous drainage

INTRODUCTION

Splenic abscess is a rare entity with a reported incidence of 0.1% to 0.7% on autopsy and a Tubercular splenic abscess is even rarer with a very high mortality rate which is 100% in untreated cases.[1] Tubercular splenic abscess can occur via two ways either in patients of miliary tuberculosis (TB) or as a primary tubercular splenic abscess in an immunocompromised individual which is extremely rare.

We report a case of large primary tubercular splenic abscess with an ultrasound guided pig tail drainage in a young individual despite of best possible efforts only 5 such cases have been found to be reported previously which have been diagnosed after thorough clinical history and examination along with radiological imaging supported with biochemical investigations like adenosine deaminase (ADA) levels and cartridge-based nucleic acid amplification test (CBNAAT) for TB in our case.

CASE REPORT

A 23 old male presented to surgery outpatient department (OPD) with complains of fever on and off, not documented for a period of 3 months associated with pain in left upper abdomen, dull aching in nature not radiating nor associated with any aggravating or relieving factors. He was having generalized weakness for 1 month. There was no history of weight loss, blood transfusion, recurrent infections or any blood disorder. On examination, pallor was present and splenomegaly was present with tenderness in the left hypochondrial region. Rest of abdomen was unremarkable. Investigations revealed anemia with thrombocytosis. Contrast enhanced computed tomography (CECT) W/A revealed spleen of size 13.2 cm with an ill-defined peripherally enhancing hypodense area of size 6.4×3.9×7.1 cm with few internal air foci along with multiple enlarged lymph nodes along mesentery largest measuring 8 mm (Figures 1a and b). Ultrasonography (USG) guided 14 Fr pigtail catheter insertion was done for drainage of pus and ADA levels of pus was 322 stained

positive for AFB (Figure 2) too based upon which patient was started on anti-tubercular drugs regime as per directly observed treatment, short-course (DOTS). Patient responded well to the treatment and a complete abatement of symptoms were seen in 10 days. Patient was discharged after 2 weeks of hospital stay with catheter in situ removed after 3 weeks after an USG was done showed minimal residual collection and is doing well on subsequent follow-ups.

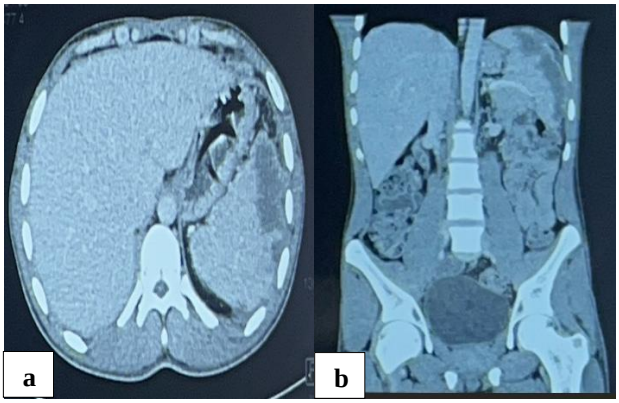

Figure 1 (a and b): CECT depicting splenic abscess marked with arrow.

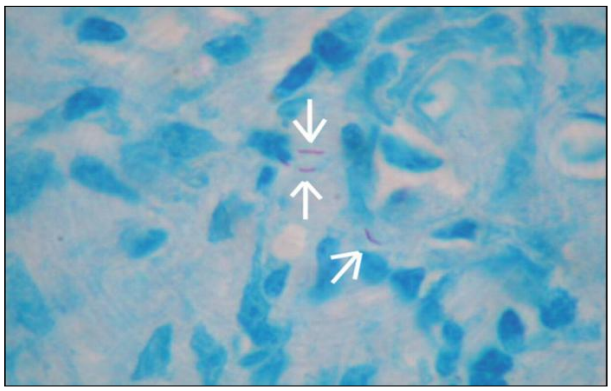

Figure 2: Acid fast bacilli marked with arrows.

DISCUSSION

Extra-pulmonary tuberculosis accounts for 15% of all cases among which having a primary tubercular splenic abscess is extremely rare in occurrence with only few cases reported in literature.[2] Splenic abscess occurs in concurrence with miliary TB and in immunocompromised individuals which was not there in our case.[3] Usual triad of splenic abscess of fever, left upper abdominal pain and leukocytosis and additionally constitutional symptoms in tubercular cases like weight loss, evening rise of temperature was not present in our case makes it rarer in its occurrence.[4] Earlier, splenectomy was performed for splenic abscess which reveals it to be tubercular on histopathological examinations with a very rate of mortality.[5] With the recent advancements in diagnostic modality has proven to be effective in managing such patients with minimally invasive techniques yet the challenges remain in draining the abscess percutaneously associated with difficult access, capsular pliability, and splenic vascularity.[6] Subsequently, splenectomy also aggravate the disease and may also lead to dissemination of tuberculosis.[7] In our case we used 14 Fr pigtail catheter under ultrasound guidance for drainage of abscess and we recommend the same for the drainage of a large unifocal abscess as an alternative to laparotomy increasing the morbidity and mortality of the patient, however splenectomy remains the modality in case of non-responsiveness of the treatment.

CONCLUSION

TB can present in any form and diagnosis is difficult in extra-pulmonary cases. However, TB should always be a differential diagnosis in cases of splenic abscess and a meticulous workup should always be done followed by adequate antibiotics and drainage of the abscess with minimally invasive technique should be done, though splenectomy is to be considered owing to poor general condition of the patient or non-responders.

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