Background

Tuberculosis (TB) being ranked as one of the top infectious causes of mortality globally, causing ill-health for around 10 million people per year, and recently it surpassed HIV as being ranked as the number one single infectious cause of death worldwide. Isolated Splenic TB is not commonly seen in immunocompetent patients, and usually a risk factor from the following is found: immunosuppression, preceding pyogenic infections, splenic abnormalities, prior trauma to the spleen, sickle cell disease and other hemopathies, and in the immunocompetent patient another body site infected by *M. tuberculosis*. In this case we present a young immunocompetent male with no past medical history, with splenic TB.

Case presentation

A 28-year-old male, not known to have any medical illnesses presented with chief complaint of fever and abdominal pain for one month, associated with weight loss of 6 kgs. Abdominal imaging revealed multiple hypoechoic lesions and CT chest showed multiple cervical and mediastinal lymphnodes. Sputum culture, PPD, blood cultures and quantiferon all were negative. Splenic biopsy was Consistent with necrotizing granulomatous inflammation. Here we present extraordinary case of splenic TB to shed the light on such important diagnosis even in Immunocompetent Patient.

Keywords: spleen, tuberculosis, splenic tuberculosis, immunodeficiency
Further imaging by MRI Abdomen showed Bulky spleen demonstrating lobulated and nodular outline with multiple intra parenchymal focal lesions of variable size and many of them appear conglomerate and ill-defined identified throughout the spleen. These lesions are predominantly hypointense in T1 and T2-WI with faint areas of high T2 signal and heterogeneous enhancement. Multiple subcentimetric and/or borderline size lymph nodes are identified at the left para-aortic region, portahepatis, posterior to the gastric fundus and left anterior supradiaphragmatic region the largest measuring 10 mm in short axis (left para-aortic) at SMA level (Figure 2).

**Figure 2** Axial T2 and multi-planer contrast enhanced T1 Fat suppressed images of the abdomen showing a bulky spleen demonstrating a lobulated outline with multiple conglomated intra parenchymal focal lesions of variable sizes showing predominantly hypo-intense signal on T1 and T2-WI with faint areas of heterogeneous enhancement.

Decision was made to go for splenic biopsy, which was Consistent with necrotizing granulomatous inflammation associated with mixed acute and chronic inflammation. No definite organism’s identified and no definite evidence of malignancy in the biopsy. After reviewing the histopathology results patient was started on Anti-TB treatment with Rifampicin, Isoniazide, Ethanbutol and Pyrizinamide along with the histopathology results patient was started on Anti-TB treatment with Rifampicin, Isoniazide, Ethanbutol and Pyrizinamide.

In summary, splenic TB is indeed a rare type of EPTB. Nonetheless, its effects cannot be understated. Risk factors such as Immunosuppression expose the immune system making it weak and vulnerable to attack from external antigens. Typically infection by Mycobacterium tuberculosis on a weak immune system makes the body unable to respond and fight. Often the body weakens, and health deprecates at a higher rate as evidenced by the loss of 6kgs in 25days in the 28-year-old patient who has no previous records of the illness.

**Conclusion**

In endemic area with Tuberculosis, Extra pulmonary Tuberculosis should be considered in patients with low immunity and those who are at high risk. Even though EPTB still can present in immunocompetent patients and further imaging and testing is required in order not to miss such cases.

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Conflicts of interest
No conflicts of interest have been found.

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