General Surgery

A CASE REPORT: SOLITARY SPLENIC TUBERCULOSIS

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KEYWORDS : Splenic Tuberculosis, Pain, fever.	

Case Report

A 25-year-old male patient presented to general surgery department with chief complaints left lumbar pain for 1.5 years and Fever, 1 month ago, associated with vomiting for 1 week. Patient was relatively asymptomatic before 1.5 years, then he developed left lumbar pain, which was dull in nature, insidious in onset, non-radiating, no aggravating, relieved by taking medications, since last 2 months the severity of pain was increased. Patient also had 1 episode of fever, which was high grade, associated with vomiting which was non projectile, non-bilious, and mainly contained food particles, which lasted for 1 week. Fever was not associated with chills and rigors and was relieved by medications. Patient had no history of cough, weight loss, anorexia and no any other significant past history.

Physical Examinations was NAD. Per Abdomen Examination was NAD No Organomegaly was found.

ESR was raised: 47 (0-15).

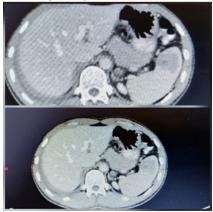
Rest all the blood reports were within normal limits.

Blood culture and sensitivity was NAD

Coombs test (direct and indirect): NAD

USG Whole Abdomen: Spleen: is normal is size, approximately 33*31 mm sized hypoechoic lesion with minimal internal and peripheral vascularity noted at lower pole. Advice further investigation.

CECT Whole Abdomen: Approximately 35*31*30 mm (AP*TR*CC) sized heterogeneously enhancing lesion with central non enhancing area is noted at lower pole of spleen.



Spleno-Portal Doppler: NAD

Patient at first was managed conservatively but there was no improvement in the left lumbar pain. So elective splenectomy was planned thereafter.

As elective splenectomy was planned, prior appropriate vaccination were given to the patient.

Patient underwent Laparotomy with splenectomy. Spleen was sent for HPE.



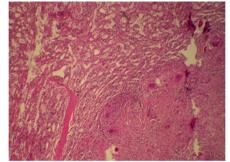
No intraop and postop complications occurred. Patient was discharged on postop day 5 on full diet with no complaints. All SR were done on postop day 14 and there was no any other complaints. HPE report came on postop day 7.

TPE report came on postop d

HPE Report:

Sections reveal histology of splenic tissue which is partly replaced by multiple epitheloid granuloma comprising of langerhan's giant cells.

CONCLUSION: Granulomatous Inflammation, possibility of Tubercular inflammation.



Patient was started on AKT (4 drug regimen). Also Inj. Streptomycin 0.75 mg IM OD for 30 days was started.

Patient came on regular follow-ups with no any other complaints.

DISCUSSION:

Tuberculosis is a multi-system disease and pulmonary tuberculosis is the most common manifestation. Extra pulmonary disease accounts for almost 15-20 % of all tuberculosis. Splenic tuberculosis was first described in the literature in 1846 by Coley. This unusual form of splenic tuberculosis is the primary involvement which is rarely reported in the literature. Patients infected with HIV or who are immunocompromised have been revealed to be a high risk for splenic tuberculosis. Many reported cases of splenic tubercular abscess are found to have underlying HIV infections. Splenic involvement therefore had been thought to be seen only in immunocompromised individuals. However, there are few case reports of splenic tuberculosis in immunocompetent patients. Sharma et al. and Gupta et al., respectively, reported rare cases of splenic abscess in an immunocompromised and an immunocompetent patient. As we present here, this case is exceptionally rare. The patient neither had a history of tuberculosis nor showed any indication of tuberculosis in the other organs. No immunosuppressive condition that could cause such infection was demonstrated. Clinical and routine laboratory findings were non-specific. Only ESR was raised. The most common symptoms that patients present with are fever (82.3 %), fatigue and weight loss (44.12 %), and splenomegaly (13.2-100 %). There are no specific symptoms for establishing the diagnosis of splenic tuberculosis. In our case, the chief complaint symptom was left loin pain, with 1 episode of fever, but no weight loss. Splenic tuberculosis in an immunocompetent individual is very rare and poses a difficult diagnosis.

Despite the reliability of common methods such as US and CT in distinguishing such lesions, from primary or metastatic tumor of the spleen, it has its limitations. The misdiagnosis rate is high if there is no tuberculosis history in other organs.

In almost all the reported cases, the diagnosis was first made by radiological findings. Surgery remains the gold standard for definitive diagnosis of such cases with an undefined etiology.

In our case, because of the position of the mass and the risk of gastrointestinal tract perforation and tumor bleeding by needle biopsy of the spleen mass, laparotomy plus splenectomy was carried out.

So far, histopathological examination is still an ideal method to confirm the diagnosis. There are five types of pathomorphological classifications for splenic tuberculosis including miliary tuberculosis, nodular tuberculosis, tuberculous spleen abscess, calcific tuberculosis, and mixed type tuberculosis.

Like the treatment of pulmonary tuberculosis, antitubercular treatment is the primary modality in treating splenic tuberculosis. Splenic tuberculosis must be carried out in accordance with the following principles: timely treatment in combination, regularly and properly through the whole course whether or not an operation is performed.

CONCLUSION:

Solitary splenic tuberculosis is rare and associated with an immunocompetent patient is extremely rare. It is hard to correctly diagnose it by US or CT scan. The best way to treat is undergo elective splenectomy with proper vaccination and then starting of AKT regimen, followed by regular followup. Also the diagnosis is mainly carried out HPE.

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