

Splenic Tuberculosis (case Series)

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Introduction

Tuberculosis continues to be a major infection and cause of death in HIV+ve patients inspite of recent advances in diagnosis & treatment. Extra pulmonary Tuberculosis is more common in immunologically incompetent patients with HIV infection. Their cd4 count is reported to be less than hundred as compared to those with pulmonary Tuberculosis with HIV infection who may be immunologically competent. Incidence of extra pulmonary TB varies from 53%to 62% in patients with HIV infection.

Splenic tuberculosis is an important manifestation of Tuberculosis and should always be considered in patients whose fever is not responding with or without HIV infection.

Material & Methods

100 cases of disseminated Tuberculosis with HIV infection were admitted to medicine wards in 2008 -2009.Out of these, 6 cases(6%) had Splenic Tuberculosis. Their clinical profile was studied. Haemoglobin, absolute lymphocytic count, X-ray chest, was done. USG/CT abdomen was done in every case. USG/CT guided FNAC from abdominal,Splenic hilar lymph node, aspiration of Splenic abscess was done for diagnosis of Splenic Tuberculosis.

Results

The following results were obtained.

S. N.	Age	Sex	Duration	symptoms				Signs	
				fever	Pain in abdomen	distension	ascitis	splenomegaly	Mass in abdomen
1	35	m	1mon	+	+	-	-	+	+
2	34	m	1mon	+	+			+	
3	38	m	2mon	+	+	-			
4	40	f	2mon	+	+			+	
5	40	m	1mon	+	+				
6	45	f	2mon	+		+	-	+	+

Thus mean age of the patient was 38.6 years. The mean duration of illness was 1.5 months. There were 4 males, & 6 females. All patients had fever, weight loss, pain in abdomen. Two patients had splenomegaly and palpable abdominalmass.

Investigations

Their mean haemoglobin was 9.5gms%.Mean absolute lymphocytic count was 4000 & mean cd4 count was 70.USG/CT abdomen revealed splenomegaly in all patients. 2 patients had single & 4 patients had multiple Splenic abscesses. Paraaortic and Splenic hilar lymph nodes were present in 4 cases, while 2 cases had only paraaortic lymph nodes. (photo no.1) Splenic aspiration from abscess site was positive for acid fast tubercle bacilli in 3 patients. In other 3 cases abdominal lymphnode

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aspiration showed presence of acid fast bacilli(photo no.2) along with cytological features of Tuberculosis.

Out of six patients three had military TUBERCULOSIS, two had tuberculous meningitis, and one had tuberculous cervical adenitis. All cases received category I antituberculous treatment under RNTCP. All cases also received ART. Four cases completed six months of AKT, became asymptomatic with resolution of sonographic abnormalities. One patient needed CAT II regime and one patient died.

Discussion

Tuberculosis of spleen is very rare in immunocompetent host, though it should be considered in the aetiology of pyrexia of unknown origin, though the percentage is low¹. It is more common in patients of disseminated or military T.B with HIV infection, which adds to their immunosuppression. Single cases of Splenic tubercular abscess have been reported by many.^{2,3,4} Few case series have also been reported.^{5,6,7,8}

Fever, pain in abdomen in left hypochondrium, with weight loss, diarrhea and sometimes ascitis are the usual presenting symptoms. In our case series all patients had constitutional symptoms and fever.

Along with pain in abdomen, but nobody had ascitis. Constitutional symptoms are usually present with disseminated Tuberculosis⁵, while there may be no abdominal symptom at all on presentation⁶. Their cd4 count is reported to be less than 100⁷, and even less than 50 has been reported by others⁶. Thus Splenic Tuberculosis is more common with advanced immunosuppression.

Diagnosis of Splenic Tuberculosis is done by USG/CT of abdomen⁹. Splenomegaly with multiple abscesses was the commonest finding. There may be multiple diffuse hypoechoic foci, solitary abscess or calcified granulomas^{4,5,6,7,8}. Diagnosis is confirmed by ultrasound guided FNAC of the lesion & demonstration of caseating granulomata and AFB in aspiration^{5,6,7,8}.

In our study diagnosis was done by Splenic aspiration in three cases and abdominal (Splenic hilum & paraaortic) lymph node aspiration in three cases.

Splenic Tuberculosis needs to be treated with anti TB drugs (cat I, RNTCP) along with ART for HIV infection. Complete resolution in 62% of cases has been reported by R. Dixit et al⁵. with treatment.

Cure with medical treatment along with drainage has been reported by Moreno s. et al⁷ in his study.

Splenectomy was done in 3 patients in his study. These patients may require glucocorticoids as response to AKT is slow due to advanced immunosuppression. Mortality is high in patients with MDR TUBERCULOSIS

In our study all patients received category I anti Tuberculosis treatment as advised under RNTCP and ART as per NACO guide lines. Four patients completed treatment for six months and showed complete resolution of Splenic abscesses on repeat usg abdomen along with complete clinical improvement.

In one patient, AKT was continued further as there resolution was partial and symptoms persisted. One patient died.

Thus Splenic Tuberculosis has no specific symptoms on presentation. It is only high index of suspicion and symptoms like pain in abdomen and prolonged fever, it is diagnosed on USG abdomen and confirmed on fnac of the Splenic lesion, in these patients of HIV infection with severe immunosuppression. Similarly slow response to AKT may also need addition of steroids to these patients. Drainage of pus in single abscess may enhance the recovery. In addition to AKT, antiretroviral therapy plays an important role in recovery of these patients.

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Photo No 1-Ct abdomen- Multiple splenic abscesses

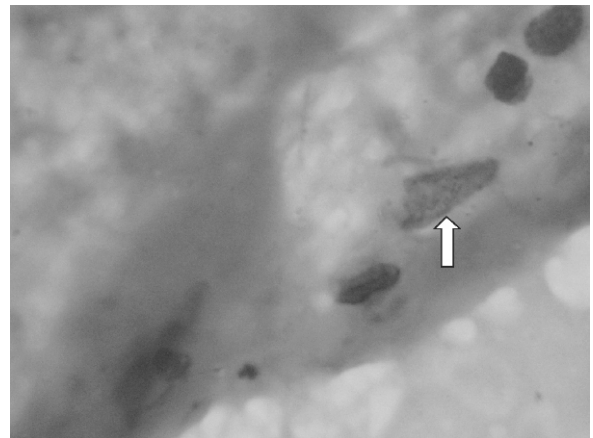


Photo No 2-ZN stained slide of splenic aspirate showing AFB