SPLENIC TUBERCULOSIS: A CASE REPORT

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Abstract: ***Splenic Tuberculosis is a rare entity, particularly among immunocompetent hosts. Herein, we present a 23 year-old man who was reffered with fever of unknown origin and eventually diagnosed to have splenic tuberculosis with an involvement of a single axillary lymph node as the sole site of disease in the other organs.***

Despite two months of treatment with antituberculous agents due to necrotising granulomatous lesion of axillary lymphadenitis, the patient underwent splenectomy for complete recovery. It seems that in this rare from of tuberculosis, splenectomy in addition to standard antituberculosis treatment is curative.

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Keywords: ***Tuberculosis, splenic tuberculosis, treatment, splenectomy.***

INTRODUCTION

Tuberculosis is perhaps as old as mankind. It is thought to be the oldest of human diseases, however its true incidence and prevalence has never been established. Its causative agent, mycobacteria, are believed to be amongst the oldest bacteria on the earth (1).

In ancient literature, descriptions of various forms of the disease might be found (1-2). It was believed that with producing effective drugs against it, tuberculosis would not be much more a problem for human health but with it's increasing incidence since early 1980's and development of new resistant forms, we recognized our ignorance about all aspects of this disease. This case report introduces a patient with a rare presentation of this "King of diseases".

CASE PRESENTATION

A 23 year-old, non–smoker man was admitted with a five months history of fever, chills, night sweating, malaise and about five kilograms weight loss. Before admission, he had been treated without having any definite diagnosis. He neither had any significant illness nor had any contact with a patient of tuberculosis or HIV. Physical examination at admission revealed high temperature (up to 39.5 ^{o}c) especially during evenings, pale conjunctivae and a palpable spleen. Paraclinical positive findings were: Hypochromic anemia (Hct:34), ESR: 80mm/h, Serum ADA: 84 U/L (normal: up to 45) LDH 535 (225-500). PPD was negative and bone marrow aspiration revealed hypocellularity with increased plasmocytes. Also, there was no lab finding suggesting immunodeficiency or HIV.

Abdominal sonography and CT-scan showed splenomegaly with multiple hypoechoic and hypodense areas, respectively, suggesting lymphoma or metastases.(Fig. 1). The patient became a candidate for diagnostic laparatomy but in his re-examination, a palpable axillary lymph node was found and excised.

The pathologic report was "chronic granulomatous caseous inflammation" in favor of T.B. Oral anti-tuberculous regimen with four drugs (Isoniazide: 300 mg/daily, Rifampin 600 mg/daily, Pirazinamide 1.5 g/daily, Ethambutol 1 g/daily) was started. After two months of drug therapy, abdominal CT-Scan showed no change, although the patient became afebrile and gained weight, with an improvement of general condition.

Therefore splenectomy was performed. The spleen was enlarged with multiple yellow colored abscesses. (Fig. 2). Smear and culture of abscesses yeilded Mycobacterium tuberculosis sensitive to antibiotics despite two months of drug therapy.

Histopathologic study of spleen showed different stages of granulomatous reaction, (simple granuloma to granulomas with caseating necrosis) consistent with tuberculosis, despite two months of drug therapy.

Oral antituberculous drugs were continued with two drugs (isoniazid and rifampin), for futher four months. The patient recovered uneventfully.

DISCUSSION

Splenic tuberculosis occurs in two forms. The first is its involvement during miliary tuberculosis

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especially in immunocompromised patients, which is not rare and it's treatment includes classic antituberculous treatment, and if possible improving patient's immunity. This form needs surgical intervention as an exception (3). Spleen is the third organ becoming involved in miliary T.B. (lung 100%, liver 82%, spleen 75%, lymph nodes 55%, bone marrow 41%) (9).

The second form is the primary involvement of spleen which is extremely rare (the same as our patient). In English, French and German literature, from 1965 to 1992, just six cases were reported (4). These patients were immunocompetent (5) and there was usually another site involved by T.B.

The presentation of these cases was fever of unknown origin (FUO), in most of them final diagnosis was made by laparotomy, although CT-guided splenic puncture is becoming a more ideal and popular method nowadays (6).

In differential diagnosis of CT findings, lymphoma, hydatid disease and metastases must be considered (7). In conclusion: despite it's rarity, splenic tuberculosis must be considered in patients, with FUO and splenomegaly.

Our single experience shows that tuberculous splenic abscesses could not be treated with antibiotics alone and early splenectomy which has been suggested by some authors seems (8-9) is a better approach followed by oral antituberculous drugs.

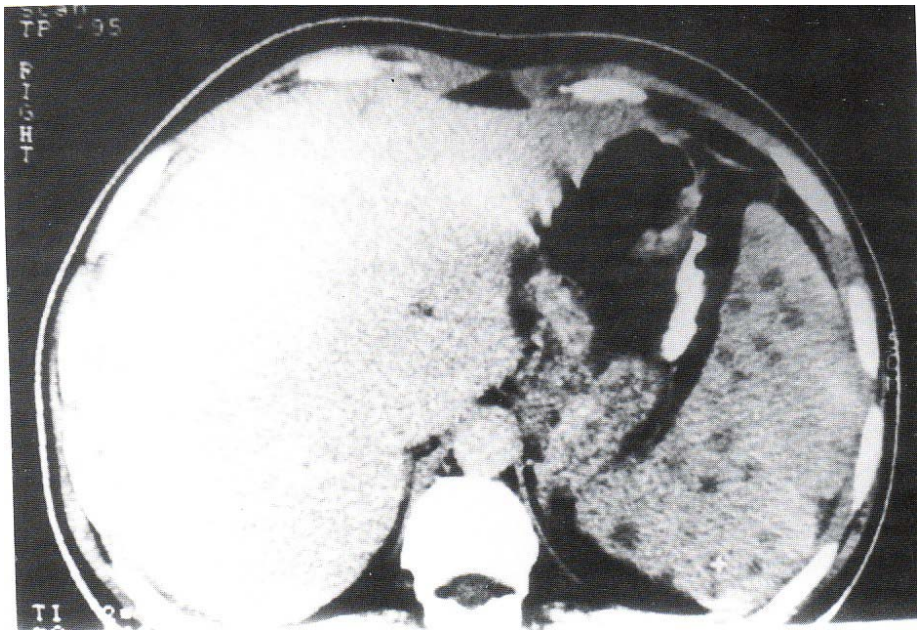

Fig. 1. Abdominal CT-Scan demonstrates splenomegaly with multiple hypodense area

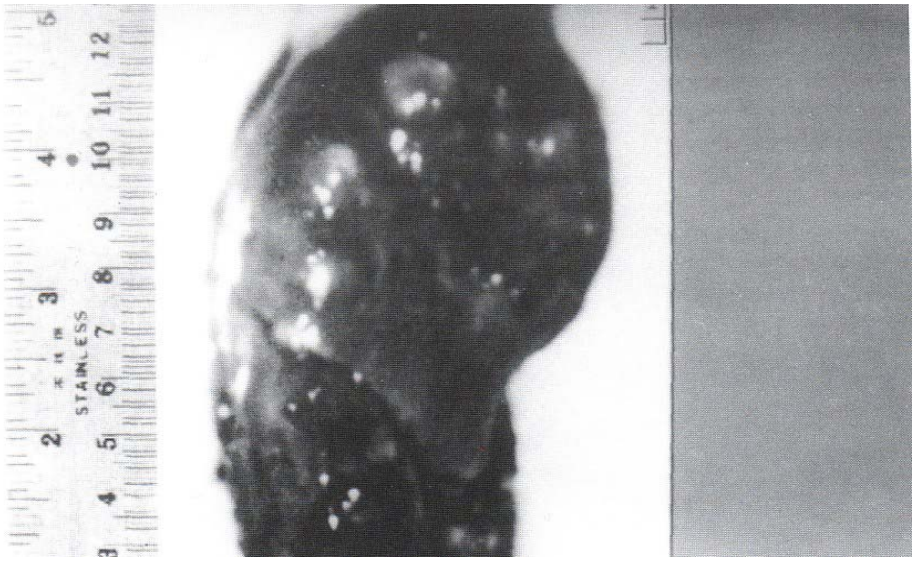

Fig. 2. Enlarged spleen with multiple yellow-colored abscesses.

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