AN UNUSUAL PRESENTATION OF TUBERCULOSIS AS SPLENIC AND HEPATIC ABSCESSES IN A PATIENT OF TYPE 2 DM

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ABSTRACT:

Tuberculosis still remains a major health problem in India, with varying clinical presentations and involvement of different organs/systems. We encountered a 42 year old male patient presenting with persistent weight loss when he was diagnosed as having Type 2 DM. Upon performing a CECT abdomen, he was found to have multiple hypodense splenic abscesses and hepatic cysts with septations. USG guided aspiration of perisplenic fluid collection demonstrated Acid Fast Bacilli with Auramine and Ziehl – Neelson stains and patient was put on ATT. This finding in an otherwise immunocompetent person, puts forward the involvement of Spleen and Liver in Disseminated Koch’s, showcasing the remarkable heterogeneity of presentation of TB.

INTRODUCTION:

Tuberculosis remains one of the most prevalent and fatal infectious diseases in spite of considerable improvements in medical science. The diagnosis of extrapulmonary tuberculosis and disseminated TB involving the abdomen is still complicated owing to vague or non-specific clinical features. Here we report a case where Splenic and Hepatic abscesses were found as chance findings on CECT abdomen and the only presenting complaint of the patient being weight loss.
CASE REPORT:

A 42 year old male, Tamilian, non smoker, non alcoholic, banker by occupation came for a routine check up with complaints of fatigue by end of the day and weight loss of one month. Physical examination of all systems revealed no abnormalities; when routine investigations revealed high blood sugars. He was diagnosed as Type 2 DM and put on OHAs and was under strict glycemic control and on further follow up, he was found to have persistent weight loss. A Complete hemogram, Throid profile and Chest X-ray were done and asked to chart temperature readings, twice everyday.

Hemogram showed Hb – 11.2, TLC – 16,200, DLC – 86.0(N) / 12(L) / 01(E) / 01(M) / 0.0(B), ESR – 45 mm /1st Hr. Temperature charting showed low grade fever (99.0°F – 100.5°F) with typical evening raise.

Thyroid Profile was within normal limits.

Chest X-ray revealed subsegmental atelectasis of left base with raised left dome of diaphragm and prominent left hilum.

CECT Thorax revealed small lymphnodes showing necrosis along aortic arch and left lateral aspect of descending aorta; small bilateral pleural effusion; raised left hemidiaphragm; parenchymal infiltrates are noted in left upper lobe; sections through upper abdomen show small cysts in hepatic parenchyma and multiple hypodense cysts were also noted in splenic parenchyma.

Figure 1:
Subsegmental atelectasis of left base with raised left dome of diaphragm and prominent hilum.
Markedly enlarged spleen showing multiple hypodense cystic regions of varied sizes. Some of these showed septations. There was an evidence of subcapsular collection with evidence of enhancing septations in it.

CECT (Whole Abdomen) revealed markedly enlarged spleen and showed multiple hypodense cystic regions of varied sizes. Some of these showed septations. There was an
evidence of subcapsular collection with evidence of enhancing septations in it. Similar hypodense lesions were also seen in Liver.

Mantoux test and HIV serology tests came out to be negative.

An ultrasound guided perisplenic fluid aspiration was done from subcapsular collection. The gram stain and aerobic culture of the pus was negative for any organisms. However, ZiehlNeelsen (ZN) stain of the pus revealed the presence of an acid fast bacilli and cytology revealed all degenerated cells.

He was put on Anti Tuberculous Treatment with Rifampicin – 450mg, Isoniazid – 300 mg, Pyrazinamide – 1500mg and Ethambutol – 800mg and subjected to follow up.

On follow up, by the end of 1 month he gained a weight of 5-7 kgs. And by the end of 6 months of follow up he gained a weight of almost 20 kilos. There was only a mild decrease in size of abscesses by the end of 3rd month and by the end of 6 months, there was a significant decrease in size of abscesses too.

**DISCUSSION:**

Clinically, TB might present as a pulmonary or extrapulmonary disease. Splenic and Hepatic TB occurs in two forms. The first form presents itself as miliary TB, especially in immunocompromised patients; it is not rare. The liver is the second and the spleen is the third most commonly infected organ in miliary TB (lung 100%, liver 82%, spleen 75%, lymph nodes 55%, bone marrow 41%). The second and unusual form of Hepatic / Splenic TB is the primary involvement of the spleen/Liver, as in our patient. Only six cases were reported in English, French and German literature from 1965 to 1992. In Iran, one case was reported
in 2002. These patients were immunocompetent, but there was usually another site infected by TB. These cases also presented with fever of unknown origin (PUO). Sharma et al. and Gupta et al. reported rare cases of splenic abscess in an immunocompromised and an immunocompetent patient, respectively. Many reported cases of splenic tubercular abscess are found to have underlying HIV infections, so splenic involvement had been thought to be seen only in immunocompromised hosts. However, there are sporadic case reports of splenic TB in immunocompetent patients. Adil et al. reported a series of ten immunocompetent individuals with splenic TB. A case report by Abbas Ali et al. also described a case report of splenic tuberculosis where the main presenting complaint was left hypochondriac pain, rather than fever and weight loss. In most of the reported data of splenic TB, patients presenting with PUO and splenomegaly had undergone splenectomy for confirmation of diagnosis. There are controversial reports from studies showing sensitivity of fine needle aspiration cytology (FNAC) in the diagnosis of a tuberculous pathology in the spleen and necessity of definitive histopathological confirmation to pinpoint etiology. Keeping in mind both the pros and cons, FNAC under USG guidance was advocated and results were fruitful.

Our case, confirmed by microbiological examination, shows that splenic and hepatic TB can occur without cough, hemoptysis and at least the typical presentation of PUO and splenomegaly, as seen in most splenic and hepatic tubercular abscess. This case makes a point that, although tubercular hepatic and splenic abscesses are very rare recently, it should be included in the differential diagnosis of unknown hepatic and splenic lesions even in immunocompetent patients while employing cost effective and non-invasive interventions as far as possible in the diagnosis.
REFERENCES:


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