

CASE REPORT

Tubercular Liver Abscess in an Immunocompetent Patient

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ABSTRACT

Tubercular liver abscess is one of the rare form of extrapulmonary tuberculosis (TB). It is usually secondary to tuberculosis of lung or gastrointestinal tract, the isolated form is even rarer. But it should be kept as one of the differentials of the mass lesions in liver. This patient presented with fever and pain abdomen for 15 days, turned out to be a case of isolated tubercular abscess. He was successfully treated with percutaneous drainage and systemic Anti Tubercular Treatment.

Key words: Tubercular liver, TB, Extrapulmonary

INTRODUCTION

Though hepatic tuberculosis is not a rare disease entity, tubercular liver abscess (TLA) is extremely rare even in a country where tuberculosis is an alarming public health problem. It is usually associated with foci of infection either in the lung and/or gastrointestinal (GI) tract¹, or with an immunocompromised state. An isolated or primary TLA with no evidence of tuberculosis elsewhere is even rarer. The diagnosis is difficult in most instances and is frequently confused with hepatoma, pyogenic liver abscess or amoebic liver abscess.²⁻⁴ The rarity of this clinical entity prompted us to present this case which involves an immunocompetent adult with an isolated hepatic tubercular abscess and with no foci of infection in the lungs or GI tract.

CASE REPORT

A 27 year male presented with fever for 15 days, pain abdomen for 10 days and vomiting for 5 days. fever was associated with chills and rigor, pain abdomen was mostly in right hypochondrium with vomiting 2-3 episode per day. There was no history of alcohol intake. He had prior history of ATT intake 10 years back for pulmonary tuberculosis. USG abdomen showed mild hepatomegaly with 250 ml abscess in right lobe of liver. Pus culture showed growth of staph aureus. Both acute and chronic viral markers were negative. Treatment was given in the form of injection meropenem and injection metronidazole. Patient improved clinically and repeat ultrasound showed collection of 30-40 ml so the patient was discharged with oral metronidazole and amox-

ycilin+clavulanic acid (as per pus culture and sensitivity). After receiving 3 weeks of treatment patient presented again with fever and abdominal pain. Repeat usg abdomen revealed a liver abscess of volume 245 cc. pus was aspirated and ZN staining was done which revealed AFB positive bacilli.

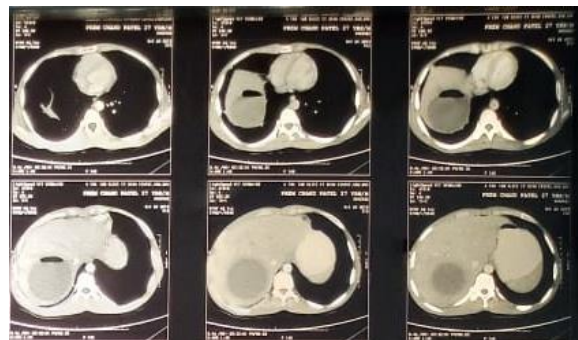


Figure 1: CECT abdomen showing localized liver abscess

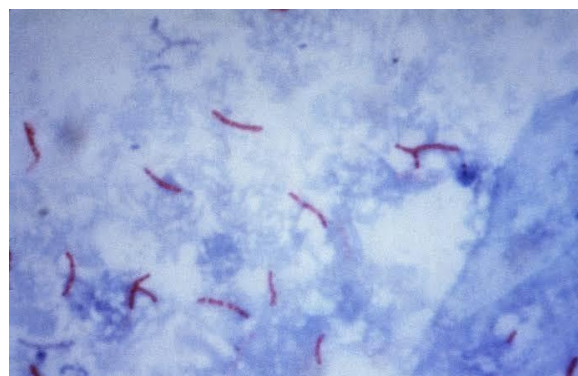


Figure 2: Pus smear showing acid fast bacilli



Figure 3: USG abdomen showing localized liver abscess



Figure 4: USG abdomen after 4 weeks of ATT

Table 1: Routine haematological parameter of the patient

Parameter	Value
Hb	13
TLC	6380
SGOT	21
SGPT	64
TB	0.2
DB	0.1
ESR	90
INR	2.7
PT	29

On this basis ATT was started and pigtail insertion done and the pus was sent for AFB culture. After 4 weeks of ATT the pus volume significantly reduced to 20 ml and pigtail was removed and patient discharged with stable vitals. Patient followed up in the OPD after 2 weeks with the report of AFB culture which showed growth in 5th week of culture.

DISCUSSION

In extrapulmonary tuberculosis, hepatic tuberculosis has been regarded as a rare form of tuberculosis.¹ Most of the cases occurs in association with military tuberculosis, mainly through hematogenous dissemi-

nation. Hepatic tuberculosis may occur in various form such as (i) military tuberculosis, (ii) primary pulmonary tuberculosis with liver involvement, (iii) primary liver tuberculosis, (iv) tuberculoma, (vi) tubercular cholangitis.

Prevalence of hepatic TLA is low with mean age of presentation being 39.2 years. TLA is frequently confused with hepatoma, amoebic liver abscess and pyogenic liver abscess, as is the case in our patient. It usually have non-specific clinical features such as fever, abdominal pain, anorexia and weight loss. Hepatomegaly is a common physical finding and jaundice is rare. The diagnosis of TLA is usually made at autopsy or occasionally after laparotomy has been performed.²

AFB is most easily found in caseous necrotic material but even the absence of AFB should not detract from diagnosis, especially in a high TB prevalence country such as ours. Recently, PCR has been found to be a useful diagnostic tool for hepatic tuberculosis.⁴ Quadruple therapy with antitubercular drugs is recommended for 1 year.³ In our patient percutaneous drainage of the abscess was combined with ATT. TLA have been successfully treated by percutaneous drainage combined with transcatheter infusion of antitubercular drugs. Surgery is reserved for cases in which percutaneous aspiration is not successful. Our patient responded well to percutaneous drainage combined with systemic ATT and was improving when last seen 5 weeks after starting ATT.

CONCLUSION

This is a rare case of an isolated hepatic tubercular abscess in an immunocompetent adult, without any evidence of pulmonary and GI tract involvement. The clinical presentation of an isolated TLA requires a high index of suspicion & should be thought of when dealing with a space-occupying lesion in the liver. In majority of patients when diagnosed early and prompt treatment is administered, the prognosis of a hepatic tubercular abscess is excellent.

REFERENCES

1. Bangaroo AK, Malhotra AS: Isolated hepatic tuberculosis. J Ind Assoc Paediatr Surg. 2005;10:105-107.
2. Balsarkar D, Joshi MA. Isolated tuberculous hepatic abscess in a non-immunocompromised patient. J Postgrad Med. 2000;46:108-109.
3. Baveja CP, Gumma CP, Chaudhary M, Jha H. Primary tubercular liver abscess in an immunocompetent adult: a case report. J Med Case Rep. 2009;3:78.
4. Polat KY, Aydinli B, Yilmaz O, Aslan S, Gursan N, Ozturk G, Onbas O: Intestinal tuberculosis and secondary liver abscess. Mount Sinai J Med. 2006, 73 (6): 887-890