

Case Series of Atypical Presentation of Liver Abscess

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Citation this Article: Dr Subhadip Paul, Dr Moumana Das, “Case Series of Atypical Presentation of Liver Abscess”, IJMSIR- January - 2024, Vol – 9, Issue - 1, P. No. 54 – 56.

Type of Publication: Case Report

Conflicts of Interest: Nil

Introduction

Liver abscess is the most common type of visceral abscess, that accounts for an annual incidence of 2.3 cases per 100,000 population^[1]. Fever and pain abdomen are the common clinical features whereas the disease can present with several other atypical manifestations that can impede the diagnostic process. Such atypical presentations of liver abscess are discussed below.

Case 1: A 23 years old female presented with complaints of recurrent dull-aching epigastric and right upper quadrant abdominal pain with vomiting and low grade fever for last 2 years. She was evaluated and diagnosed to be a case of pyogenic liver abscess and was treated with oral antibiotics. But despite of completion of antibiotic course she didn't have any relief of symptoms. She had to repeatedly take analgesics for her pain. 1 month back she again presented with sudden onset severe abdominal pain, for which she was admitted and CECT whole abdomen was done.

CECT was suggestive of evolving liver abscess in left lobe of liver segment III (6x5cm) and right lobe of liver segment IV(1.2x1.3 cm). USG-CT correlation was done

which was suggestive of organized abscess. FNAC of the liver lesion done and HPE findings showed extensive necrotic background with epithelioid cell granulomas and langhans type of giant cells suggestive of tuberculosis. She was started on antitubercular therapy. Her symptoms gradually improved and she was found to be doing well on further follow-up.

Case 2: A 40 years old male with dull-aching pain over right hypochondrium for last 2 months, presented at emergency with sudden onset breathlessness for last 2 days. He was a known case of alcohol use disorder for last 20 years. On examination, he had tachycardia, tachypnoea, SpO₂ 84% in room air, tenderness present over right hypochondrium. Chest X-ray showed right sided pleural effusion. His Ultrasound abdomen revealed multiple heterogenous hypoechoic area in both lobes of liver, largest one measuring 5x3cm with subdiaphragmatic collection. Blood investigations showed total leucocyte count 44,000 cu/mm. Sputum sent for culture and sensitivity and CBNAAT were negative. PCD was inserted in subdiaphragmatic collection and right lobe abscess in segment 8 of liver. Treatment was

started in the form of broad spectrum antibiotics and no response was observed after 2 weeks of treatment. In view of large pleural effusion PCD was placed at right subdiaphragmatic and right 5th intercostals space. Pus culture was sent for microbiological & biochemical analysis. Gram stain showed trophozoites of *Toxoplasma gondii*.

He was started on oral Trimethoprim and Sulfamethoxazole. Clinical improvement observed on 4th day of treatment. There was complete resolution of liver abscess in ultrasonographic evaluation of the abdomen performed after 4 weeks.

Case 3: A 26 years old male with alcohol use disorder presented with shortness of breath for last 4 days. Breathlessness was associated with retrosternal chest pain with sweating. Breathlessness increases on supine posture. On examination, patient was tachypneic, febrile, hypotensive with SpO₂88% in room air. Tenderness present over right hypochondrium and bilateral basal crepitations with decreased breath sound on left side.

Chest X-ray showed bilateral pleural effusion with enlarged cardiac silhouette. Echocardiography showed moderate pericardial effusion (largest pocket 11.7cm) without any sign of cardiac tamponade. Ultrasound abdomen showed well defined multiloculated SOL (12.5 x 7.6 cm) with irregular margin in segment II of left lobe of liver.

CECT thorax revealed bilateral moderate pleural effusion with atelectasis of lower lobes and massive pericardial effusion. Further CECT whole abdomen was done which revealed a well circumscribed 117.4 x 102.7mm, low attenuated focal lesion with eccentric septae and hypoattenuation rim around capsule was seen in antero-superior left lobe of liver segment II with shaggy irregular inner wall and thin capsule, in compressed liver parenchyma suggestive of abscess.

Patient was treated with Percutaneous drainage of liver abscess and intravenous antibiotics. Patient responded to treatment and serial monitoring of echocardiography showed minimal collection. PCD was removed after 2 weeks. He was discharged in hemodynamically stable condition.

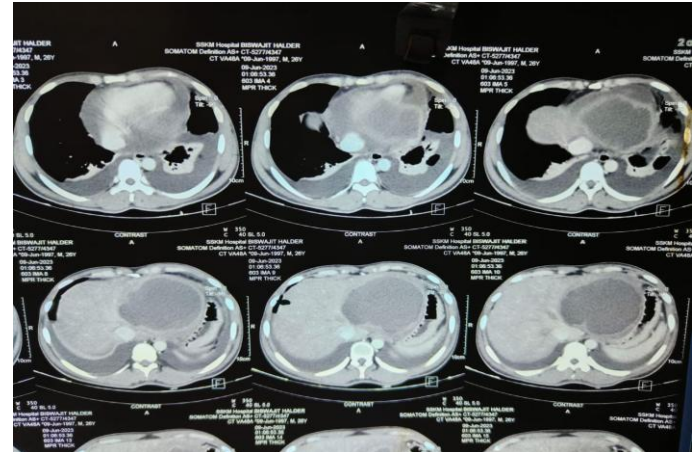


Figure 1

Discussion

Tuberculosis is still global health problem affecting 95% of developing nations. Pulmonary tuberculosis is the common presentation of tuberculosis. Involvement of biliary system remains uncommon [2,3]. Tubercular liver abscess is a very rare presentation. Absence of acid-fast bacilli doesn't rule out the diagnosis. Polymerase chain reaction showed better diagnostic yield over other conventional test [4]. Our first case was initially managed in the line of amoebic liver abscess owing to its endemicity. Then after diagnosis the best management was anti-tubercular drugs [5,6]. This case highlights the need of investigating tuberculosis in a case of pyrexia of unknown origin with abscess and anti-tubercular drugs showed effective.

Our second case is an unusual presentation of liver abscess presented with right hypochondriac pain with breathlessness with lack of response to broad spectrum antibiotics. Finally patient was diagnosed with rare

presentation of toxoplasma gondii and responded to treatment.

Last but not the least, an atypical presentation of ruptured liver abscess in the form of breathlessness and echocardiography suggestive of pericardial effusion. CECT Chest with whole abdomen showed ruptured liver abscess communicating with pericardium. Patient responded to USG guided PCD drainage in the left lobe abscess and i.v antibiotics.

References

1. Population based study of the epidemiology of the risk factors for pyogenic liver abscess. Kaplan GG, Gregson DB. *Clinical gastroenterology Hepatology* 2004;2(11): 1032.
2. Raviglione MC, O'Brien RJ. Tuberculosis. In: Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson JL, Loscalzo J, editors. *Harrison's Principles of Internal Medicine*. 17th ed. New York: McGraw Hill; 2008:1006-1020.
3. Hayashi M, Yamawaki I, Okajima K, Tomimatsu M, Ohkawa SI. Tuberculous liver abscess not associated with lung involvement *Intern Med*. 2004;43(6):521-523.
4. Diaz ML, Herrera T, Lopez-Vidal Y, Calva JJ, Hernandez R, Ruiz Palacios G, Sada E. Polymerase chain reaction for the detection of Mycobacterium tuberculosis DNA in the tissue assessment of its utility in the diagnosis of hepatic granulomas. *J Lab Clin Med*. 1996;127:359-363.
5. Frank BB, Raffensperger EC. Hepatic granulomata. Report of a case with jaundice improving on antitubercular therapy and review of the literature. *Archives of Internal Medicine*. 1965;115:223-234.
6. Mustard RA, Mackenzie RL, Gray RG. Percutaneous drainage of a tuberculous liver abscess. *Canadian Journal of Surgery*. 1986;29(6):449-450.