

Case Report

A Rare Case of Ruptured Koch's Liver Abscess

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ABSTRACT

Introduction: Tuberculous liver abscess is very rarely seen with a prevalence of only 0.34%. Due to non-specific signs, symptoms and imaging features, diagnosis of tuberculous liver abscess is rarely made.

Discussion: Hepatic tuberculosis is an uncommonly reported condition. It is rare even in countries where tuberculosis is endemic. The clinical diagnosis of this entity is rarely made before aspiration or histopathological examination as it has nonspecific clinical and imaging features and it is also rare. Only few cases of ruptured tuberculous liver abscesses have been reported in the literature. In our case following drainage of the abscess the patient responded well to the anti-tuberculous chemotherapy. So even though amoebic and pyogenic liver abscess are more common, the possibility of tuberculous liver abscess should always be considered if patient has findings suggestive of active or healed tuberculosis like calcified per portal and per pancreatic lymph nodes and lung lesions.

Conclusion: Though tuberculous liver abscess is very rare, it should be considered as a one of the differential diagnosis for liver abscess. It's clinical diagnosis rarely made before aspiration or histopathological examination due to nonspecific clinical and imaging features and it is also rare. So diagnosis is delayed and patient directly may present with complications like rupture, secondary infection.

Key Words: Liver abscess, Tuberculosis, Rupture, peritoneum, pleura.

INTRODUCTION

Tuberculous liver abscess is very rarely seen with a prevalence of only 0.34% in patients with hepatic tuberculosis. [1] Due to non-specific signs, symptoms and imaging features, diagnosis of tuberculous liver abscess is rarely made before aspiration or histopathology. [2] We are presenting a rare case of tuberculous liver abscess with rupturing in peritoneum causing tuberculous peritonitis with localised rupture in right pleura.

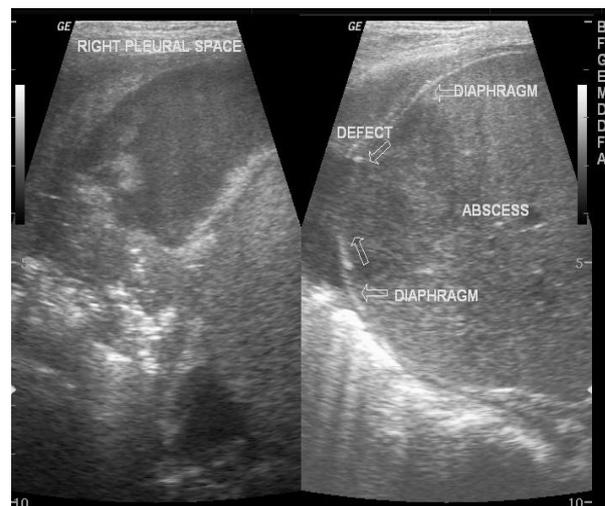


Figure 1: USG Showing Ruptured Liver Abscess



Figure 2: CXR shows opacity in right pleura S/o rupture of liver abscess in pleura.

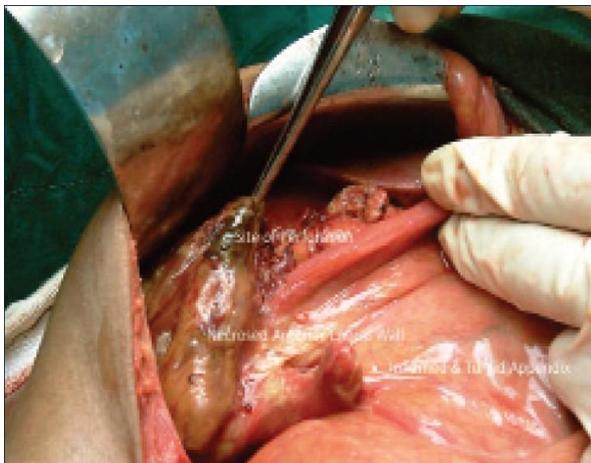


Figure 3: shows intra operative finding.

Presentation of Case

A 40 year male patient working as a labourer coming from lower socioeconomic class admitted with complain of pain in abdomen, cough and anorexia since 1 month. Breathlessness, abdominal distention, vomiting were since 2days. Blood investigations were done. Ultrasonography of abdomen was s/o hepatomegaly with 16x15 cm liver abscess in Right lobe (aspirable) with defect noted in right dome of diaphragm with collection in right sided pleura as shown in figure 1. Chest X-ray PA view shows opacity in right pleura as shown in figure 2. Computed Tomography of abdomen was s/o hepatomegaly with large well defined cystic rim enhancing lesion of 18x16x18 cm noted in right lobe of liver s/o liver abscess. Defect of approximately 12mm noted in superior wall of abscess with localized

rupture in sub diaphragmatic region and in peritoneum. Mild free fluid was noted. Patient was posted for emergency exploratory laparotomy. On exploration there was a large abscess in superior surface of right lobe in 5th and 8th segment of liver with localized collection and adhesions with diaphragmatic surface as shown in figure 3. There was a single approx 1x1 cm size of rent in right diaphragm which was closed with prolene. Approx. 1 liter pus drained from abscess with thorough wash given. Pus was sent for culture and Acid fast bacilli (AFB). On Right side Inter-costal drain (ICD) was inserted in the 5th Inter-costal space in anterior axillary line. Three abdominal drains one in abscess cavity, second in subhepatic space and third in pelvis were kept and fixed. Postoperative period was uneventful. Pus for AFB was come positive so patient was started on Antituberculous therapy (ATT). Patient respond well to ATT and doing well at present.

DISCUSSION

Hepatic tuberculosis is an uncommonly reported condition and occurs in micro and macronodular forms. Micronodular TB is seen in the form of nodules of 0.5 to 2 mm diameter in size. Macro - nodular form of tuberculosis probably spreads to the liver from the par aortic or portal nodes via the portal vein or hepatic artery. [3] Tuberculous liver abscess is uncommon even in countries where tuberculosis is endemic. The clinical diagnosis of this entity is rarely made before aspiration or histopathology as it has nonspecific clinical and imaging features and it is also rare. Even in developing countries like India where tuberculosis is so common, diagnosis of tuberculous liver abscess is usually not considered. Amoebic and pyogenic abscesses are more common. The diagnosis of tuberculous liver abscess has been made in the majority of cases at laparotomy due to non-detection of mycobacteria in the percutaneous liver aspirate. [4] Alternatively, acid fast bacilli

can be demonstrated in the fluid obtained from the abscess, as seen in our case but the results may be negative. Only few cases of ruptured tuberculous liver abscesses have been reported in the literature. [5-7] Jain et al reported a case in which a tuberculous liver abscess ruptured into the retroperitoneum. [2] Only one to two case of tuberculous liver abscess rupturing into the peritoneum has been reported in the literature. In our case following drainage of the abscess the patient responded well to the anti-tuberculous chemotherapy. So even though amoebic and pyogenic liver abscess are more common, the possibility of tuberculous liver abscess should always be considered if the patient has findings suggestive of active or healed tuberculosis like calcified periportal and peripancreatic lymph nodes and lung lesions. Delay in diagnosis may lead to complications, multiple operations and morbidity as rupture of abscess occurred in our case. [7] Patient may present directly with complications like rupture into pleura, peritoneum, pericardium, in bowel. Some times tuberculous liver abscess may become secondarily infected.

CONCLUSION

Though tuberculous liver abscess is very rare, it should be considered as a one of the differential diagnosis for liver abscess. It's clinical diagnosis rarely made before aspiration or histopathology as it has

nonspecific clinical and imaging features and it is also rare. Delay in diagnosis may lead to complications, multiple operations and morbidity as rupture of abscess occurred in our case.

REFERENCES

1. Essop AR, Segal I, Posen J, Noormohammed N. Tuberculous abscess of the liver: a case report. *S Afr Med J* 1983; 63: 825-826.
2. Jain R, Sawhney S, Gupta RG, Acharya SK. Sonographic appearances and percutaneous management of primary tuberculous liver abscess. *J Clin Ultrasound* 1999; 27: 159-163.
3. Akhan O, Pringot J: Imaging of abdominal tuberculosis. *Eur Radiol* 2002, 12:312-323.
4. Rahmatulla RH, Ibrahim A, Al- Rashed RS, Mayet IY. Tuberculous liver abscess: a case report and review of literature. *European Journal of Gastroenterology & Hepatology* 2001; 13: 437-440.
5. Jain VK, Mathur KC, Chadda VS et al. Tuberculous liver abscess. *Indian J Chest Dis Allied Sci* 1981;23: 97-99.
6. Tsunoda T, Shiogoma T, Koga M et al. Tuberculous liver abscess with bronchobiliary and gastrobiliary fistulae- a case report. *Surg Today* 991; 21:100-104.
7. Flemma RJ, Anlyan WG, Durham NC. Tuberculous broncho & biliary fistula. *J ThoracCardiovascSurg* 1965; 49: 198-201.

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