CASE REPORT

Fish Bone Induced Hepatic Abscess : A Rare Case

Adil Khan, Vivek Bhardhan, Aswini Kumar Sahoo

Abstract

Pyogenic liver abscess usually presents with fever with chills and rigor, jaundice and pain abdomen. Hepatic abscess due to foreign body perforation at GI tract are extremely rare. We report a case of fish bone ingestion causing stomach perforation which lead to hepatic abscess and patient was successfully treated with antibiotics and percutaneous drainage with foreign body left in situ.

Key Words

Fever, Fish Bone, Foreign Bodies, Pain Abdomen, Pyogenic Liver Abscess

Introduction

Most of foreign bodies do not cause any symptoms, few may cause GI bleeding and perforation. However, in few cases sharp foreign bodies may perforate lesser curvature due to peristaltic movements. Because of close proximity of lesser curvature with left lobe of liver, it may cause injury to it, followed by abscess formation. The patient will present with fever, chills, pain abdomen, jaundice and may have toxic look.[1]

USG is the initial investigation to evaluate the abscess which presents as hypoechoic lesion. The contrast enhanced CT or triple phase CT are required to evaluate further. It will differentiate from tumor. Again foreign body will be detected in CT, so all cases of hypoechoic lesion should go through CT.[2] Surgical operation is preferred to prevent recurrence in foreign body induced abscess. However, antibiotics and percutaneous drainage may be tried in case to case basis.[3]

Case Presentation

A 59 year old female from Bhubaneswar presented to IMS & SUM Hospital with complaints of high grade continuous fever associated with chills and rigor, 2 episodes of vomiting, headache, myalgia since last 8 days. On presentation, she was febrile (104.6F), tachypnoeic (28 breaths/min), her pulse was 109 beats/min, BP 100/60 mm Hg with Spo^2 96% in room air. On systemic examination, abdomen was soft with tenderness in right hypochondrium. Other system examination were normal. On investigation Hb was 11.2 g per dl WBC count 15.4 X10^3/uL, CRP 348 LFT: S. Bilirubin (Direct)-0.96mg/dl, SGOT-47.20IU/L,SGPT-48.30IU/L,ALP-266IU/L, Albumin-2.9gm/dl, ESR-130mm/1hr, Peripheral Smear-Neutrophilic leucocytosis with toxic changes, Fibrinogen->900 mg/dl, Ferritin-408.59 ng/ml, S. LDH-303u/l. Dengue, malaria , scrub typhus and typhoid for which she tested negative .

USG (Whole abdomen) revealed well defined thick lesion containing numerous foci involving segment IV of liver (likely abscess) and Hepatosplenomegaly.

CT Scan showed Hepatomegaly with thin walled periphery enhancing lobulated outline hypodense lesion (abscess) in segment IV and thin linear obliquely oriented radiodense structure **(fish bone)** along posterior inferior aspect of lesion. Small bridging tract noted in lesser curvature of stomach near gastric antrum and inferior hepatic capsule interface with perigastric omental fat stranding (possible site of gastric sealed perforation by

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fish bone with migration into hepatic parenchyma). Few small oval periportal, portahepatis lymph node[Figure 1 & 2].

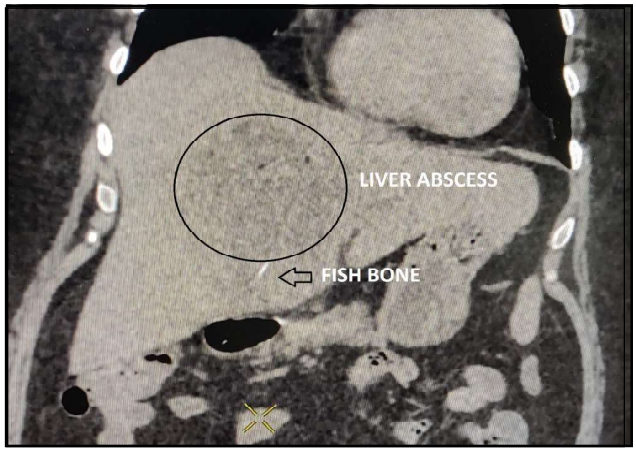

Fig. 1: Shows liver abscess & fish bone

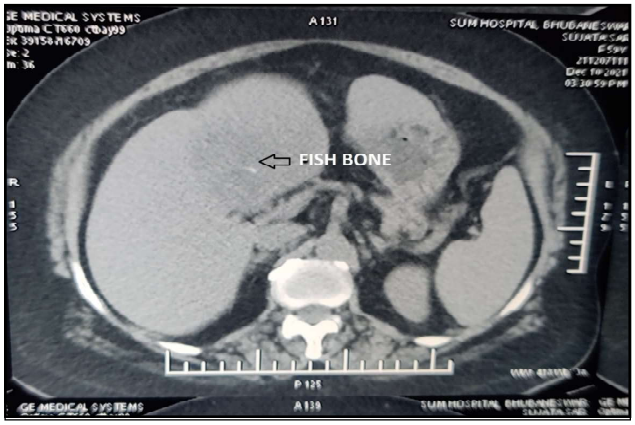

Fig. 2: Shows liver abscess & fish bone

Pt was treated with piperacilin tazobactum amd metronidazole injection and she improved after 10 days of treatment. Ultrasound review shows the size decreased significantly and antibiotics continued for another 4 days and the patient was discharged. On follow-up patient was doing well. Consent of patient taken for publication of data without disclosing the privacy.

Discussion

More than 80% of foreign bodies pass through the GI tract within one week. In some cases with help of endoscopy. Only 1% cases cause perforation and 71% of such cases occur in the peritoneal cavity[1]. Sharp objects can cause perforation. Peristalsis can cause foreign body to penetrate the gastric wall. Omentum and neighbouring organs surrounding it and seal the perforation. Left lobe of liver is affected due to proximity with stomach. However, most patients don't remember having ingested a foreign body which makes the diagnosis difficult. USG is the first choice to detect abscess. CT demonstrates a sensitivity of 90% to locate the foreign body[2]. In view of proximity at segment IV to vascular structures, patient treated with antibiotics and percutaneous drainage with foreign body in situ[3]. Surgical operation may be tried in case of recurrence.[4,5]

Conclusion

Pyogenic liver abscess follwing foreign bodies like fish bone are uncommon but curable. Causative organisms may include E.Coli, streptococcus, anaerobes, bacteroids, etc. It usually results from billiary obstruction, direct extension, hematogenous, trauma & infection of liver tumor or cyst. Fever and abdominal pain are the usual complaints along with tenderness, jaundice, guarding. Lab findings reveal - leucocytosis, elevated ALP and hypoalbuminemia. Imaging studies are confirmatory. All cases where USG is normal CECT abdomen should be done. Prolonged antibiotic therapy with drainage of the abscess is the mainstay of treatment. If symptoms are persisting surgical removal of fish bone should be done.

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