



Case Report

Liver Abscess due to Enterohepatic Migration of Fish Bone

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Abstract

Liver abscess due to accidentally ingested fish bone is extremely rare; only 30 cases have been described in the literature. We are reporting a 46-year-old female presenting with liver abscess due to enterohepatic migration of accidentally ingested fish bone.

Key words: Liver abscess, enterohepatic migration, fish bone

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Introduction:

Gastrointestinal foreign bodies are encountered quite commonly in clinical practice. In most cases, these foreign bodies pass spontaneously with stool; but in some cases endoscopic removal is required. Liver abscess due to an accidentally ingested fish bone is exceedingly rare; only 30 cases have been described in the literature.¹ So, fish bone-induced liver abscess poses a diagnostic challenge to the physicians. We are reporting a case of liver abscess due to enterohepatic migration of fish bone through the first part of duodenum.

Case report

Amena Begum, 46 year-old female, presented with 15 days high grade fever without chills and rigors and upper abdominal pain. She had no viral prodrome. She had no history of alcohol intake or drug abuse. On systemic examination, mild tenderness on right hypochondriac region was noted. Complete blood count revealed

leukocytosis (WBC-21500; 80% neutrophils), and normal haemoglobin and platelet counts. Serum bilirubin and liver enzymes were normal. Her serum lipase, amylase, urinary amylase and renal function tests were normal. Ultrasonography of the abdomen (figure 1) as reported as a left lobe liver abscess measuring 5.5 cmx4.4 cm with evidence of linear calcification, normal gallbladder and normal biliary ducts. She was treated by ciprofloxacin and metronidazole intravenously for 10 days and her fever subsided.

After one month, she presented again with a 10 days history of abdominal pain and high grade fever. Physical examinations were normal except mild tenderness on right hypochondriac region. Blood counts again showed a leukocytosis (16,700 with 87.6% neutrophils). Her repeat liver function tests and renal function tests were normal. Plain X-ray of the abdomen in erect posture revealed no abnormality. A CT scan (figure 2) of abdomen showed a thick rim enhancing hypo dense lesion

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of size about 3x2 cm in the left lobe of liver and a straight linear radio dense structure of length about 2.5 cm is seen in the inferior margin of the lesion having contact with the thick walled first part of duodenum. The biliary ducts and gallbladder were unremarkable. The spleen, pancreas, both kidneys and adrenals were normal. Upper GI endoscopy was then done which showed normal stomach and duodenum. The findings of CT abdomen were consistent with a liver abscess with the presence of a foreign body in the abscess cavity. On query, our patient could not recall ingesting a fish bone.

She was referred to the Department of Surgery of Rajshahi Medical College Hospital. Laparotomy was done, the abscess was drained and a 2.5 cm long fish bone was removed (figure 3) from a partially healed hepato-duodenal fistula communicating between first part of duodenum and liver abscess cavity. The postoperative period was uneventful. She was discharged with cefixime and metronidazole for 10 days. She was asymptomatic when she came for follow up one month later.



Figure 1: USG showing liver abscess with fish bone, mistaken as linear calcification

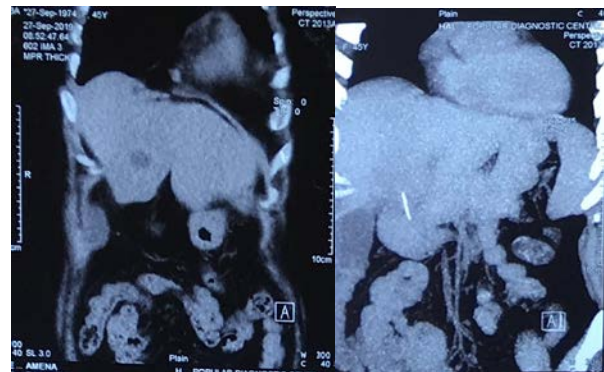


Figure 2: showing liver abscess with a foreign body in the abscess cavity



Figure 3: Removed fish bone

Discussion

The first case of liver abscess secondary to gastrointestinal tract perforation by a foreign body was described by Lambert in 1898. The diagnosis of fish bone induced liver abscess is often challenging because history of fish bone ingestion is often absent, fish bones are not readily seen in plain X-Ray abdomen, sonologist often dismisses the fish bone as an artefact and endoscopy also fails to visualize the fish bone because of enterohepatic migration. CT scan is the best tool to visualize and localize the fish bone. Fish bone induced liver abscess can be managed conservatively with antibiotics alone where fish bone is left in situ³ or the fish bone can be removed by image guided percutaneous transhepatic route³, laparoscopy or laparotomy. In our case, laparotomy was chosen because of no prior experience of image guided percutaneous transhepatic removal of fish bone and limited experience with laparoscopic foreign body removal. Most cases of fish bone induced liver abscess recover completely once the diagnosis is

made, abscess is treated appropriately and the fish bone is removed.

Conclusion

To diagnose recurrent liver abscess due to foreign body is complicated by the lack of specific symptoms and low index of clinical suspicion. So, in the case of liver abscess unresponsive to aspiration and antibiotics therapy, foreign body migration like a fish bone can be considered among the rare but potential aetiologies.

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