CASE REPORT

Gallbladder Ascariasis : A Rare Case Report

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ABSTRACT

Ascariasis is the most prevalent helminthic infection to infest human beings caused by Ascaris lumbricoides. Rarely the worm migrates through ampulla of Vater and may enter common bile duct. This is a case report of live Ascaris lumbricodes in gallbladder, on USG.

Keywords: Ascariasis, Gallbladder, Ultrasonographic findings

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INTRODUCTION

Ascariasis is the most frequent helminthic infection in human caused by ascaris lumbricoides which normally live in intestinal lumen.[1] Migration of the worm into the biliary tree can occur but invasion of the gallbladder is rare because of narrow and tortuous nature of the cystic duct.[2,3]

Ultrasonography is the first line and preferred modality of choice for imaging of billiary system. We are reporting a rare case of gallbladder ascariasis detected by ultrasonography.

HISTORY

A 35 years old female presented to emergency department with a complaints of, a continuous severe epigastric pain for 1 day preceded by on and off pain for one month which was aggravated after eating meal. There is no history of vomiting, fever or shortness of breath. She had past history of gastritis.

At physical examination, she was ill looking but oriented though pallor was observed. Abdomen examination revealed tenderness and gaurding on right hypochondrium.

A complete blood cell count demonstrate Hb:8.30 gm%, serum amylase 600IU/l, serum lipase : 207IU/l, total bilirubin : 2.4 mg/dl, direct bilirubin;1.8 mg/dl, AST:490, ALT:283,LDH:1080.

IMAGING FINDINGS

The patient underwent ultrasonography which shows an actively mobile single linear hypoechoic tubular structure with well defined echogenic wall extending to cystic and common bile duct.

Other sonographic findings include partially distended gallbladder with edematous and thickened gallbladder wall measuring approx. 4.9 mm. Common bile duct was dilated measuring approx.1.03 cm with prominent intrahepatic billiary radicals.

The lady was then advised for liver function test, serum lipase and amylase estimation and provisionally diagnosed as GB ascariasis with surrounding pericholecystic changes.

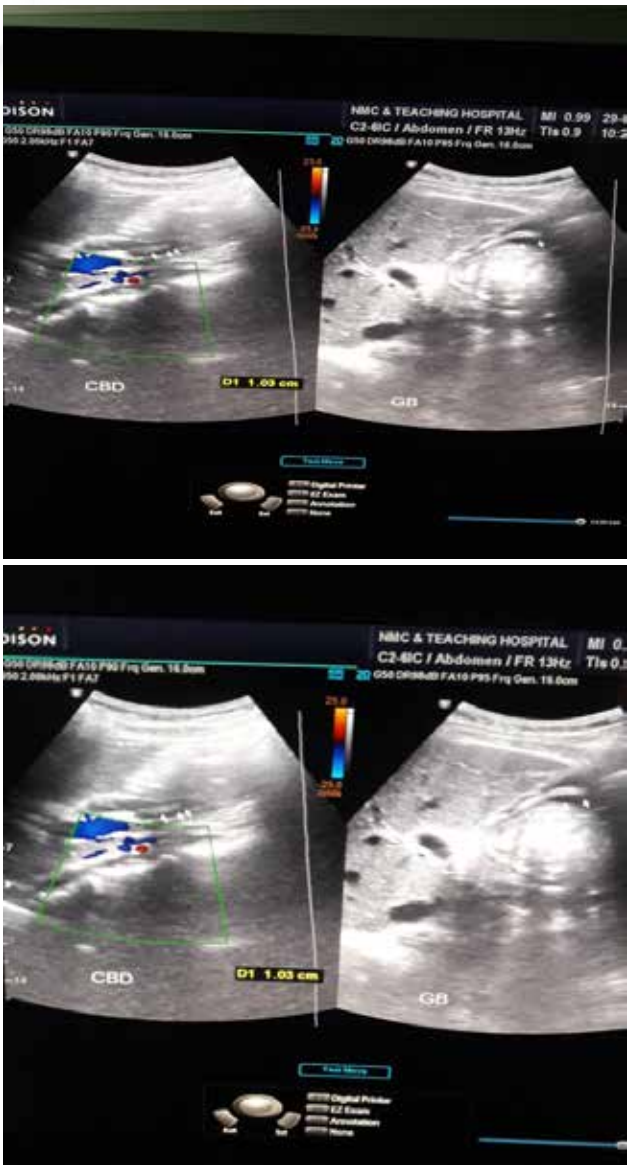

Fig: 1 Showing GB Ascariasis with echogenic worm floating with in GB Lumen with dilated CBD.

PATIENT EVALUATION

Patient was then admitted in surgery ward for further management and evaluations.

The patient was on analgesics, antibiotics, albendazole and intravenous fluids and was further planned for surgery. Fortunately on the third day of admission she vomited a dead worm.

PATHOLOGICAL EXAMINATION

The gross specimen was obtained was inspected and confirmed to be a dead ascariasis worm. No histopathology needed to prove it.

Fig: 2 Gross specimen after emesis

FOLLOW-UP OF THE PATIENT

The patient was followed-up to the radiology department on the next day after expulsion of the worm. Ultrasonography demonstrated a normal gallbladder, biliary tree and the worm was no longer seen. The patient was discharged on the next day.

DISCUSSION

Ascarias lumbricodes in the gallbladder is not common even in endemic areas. The adult worms from small intestine can move to the billiary tree and gallbladder which may cause various hepatobilliary complications like acute cholecystitis.[4] The spiral valves of Heister, keeps the cystic duct opening closed, provides natural barrier for entry of worm into the gallbladder.[3] Dilated cystic duct may favour entry of the worm into the gallbladder. Ultrasonography is the first line and preferred modality of choice for imaging of billiary system. It is non-invasive and cost effective investigation. The gallbladder ascariasis is a rare ultrasonographic finding. [5]

A live Ascarias moving within gallbladder lumen makes a clear diagnosis. Ascarias appears to have hypoechogenic tubular structure with echogenic lines within gallbladder.[3] In our patient ultrasonogram of gall bladder showed a mobile adult worm that responded to the conservative treatment with emesis of dead worm and its follow up confirmed our diagnosis.

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