

CASE REPORT

ASCARIASIS AND COEXISTANT STONE IN COMMON BILE DUCT IN POST CHOLECYSTECTOMY POST CHOLEDOCHOLITHOTOMY WOMAN: A CASE REPORT

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ABSTRACT: Ascariasis is one of the commonest infections in Asia. Biliary ascariasis is a serious presentation of ascariasis which can result in life threatening complications including cholangitis, choledocholithiasis, Liver abscess, and Pancreatitis. We present a case of female from north Bihar who presented to us with biliary ascariasis and concomitant stone. Diagnosis was established by abdominal ultrasonography. Choledocholithotomy done and a live round worm with two biliary stone extracted.

KEYWORDS: Biliary ascariasis, Choledocholithiasis, Choledocholithotomy.

INTRODUCTION: Ascariasis is one of common helminthic disease in human.¹ It is widely distributed in tropical and sub-tropical regions where there is insufficient sanitation, hygiene, and education regarding these parasite.² In endemic areas 30% of adults and 60-70% of children harbor the adult worm.³ Worldwide ascariasis is second to gallstone as cause of acute biliary symptoms.⁴ Common presentation of Biliary ascariasis include biliary colic, acute cholangitis, Obstructive jaundice, Choledocholithiasis and cholecystitis.⁵

Here we present a case of a female from north Bihar, who presented with pain upper abdomen, nausea and excess gas formation that had undergone Cholecystectomy and Choledocholithotomy two year back.

CASE REPORT: A 50 years old female from West Champaran district of north Bihar presented with pain upper abdomen two month back. She was suffering from pain upper abdomen, nausea and excess gas formation since one year. Pain aggravated in severity thrice in year which needs hospitalization. Patient has undergone cholecystectomy and choledocholithotomy two year back. Initial work -up showed elevated SGPT, serum alkaline phosphatase, leucocytosis with normal serum bilirubin. Ultrasound of abdomen revealed dilated Common bile duct (10mm) with two stone of size 6mm and 7mm size.

Patient was treated with Intravenous fluid, antiemetic, antibiotic and ursodecholic acid. Patient's symptoms improved. Ten days back patient again came with severe pain abdomen and nausea. Again ultrasound of abdomen was done which revealed round worm with stone in Common bile duct. Choledocholithotomy was done. One living round worm of about 15 cm in length was removed along with two stone of size 7 mm and 9mm. (Figure-1)

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Fig. 1: Round worm along with stone

DISCUSSION: *Ascaris Lumbricoides*, the roundworm, is the most common parasite that infect human gastrointestinal tract. It has a complex life cycle, which is completed in intestines and lungs and finally in jejunum. Adult worm may grow up to 40cm in length and live for two years.⁶ The worms have a tendency to explore small opening. When in the duodenum they may enter the ampullary orifice and advance into bile and hepatic duct, ultimately causing hepatobiliary ascariasis.⁷ Hepatobiliary ascariasis is more common in females and after cholelithiasis, is the second most common cause of acute biliary symptoms world-wide.⁸ Common presenting symptom is pain. Fever, jaundice, nausea and vomiting are less frequent.⁹

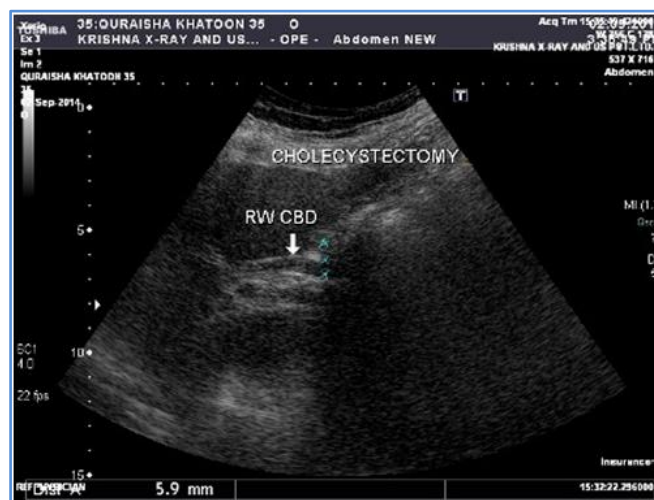


Fig. 2: Round worm with stone in C B D

Previously diagnosis of ascariasis migrating into biliary tract was difficult and usually made at laprotomy.¹⁰ Nowadays, Abdominal ultrasound is imaging modality of choice of hepatobiliary ascariasis.

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Movement of worms can also be seen.¹¹ Abdominal ultrasonography has been shown to have a high diagnostic accuracy as a non-invasive procedure.¹² The characteristic sonographic feature of worms in the common bile duct is a long linear parallel echogenic strip, usually without acoustic shadow.¹³ Other favorable imaging modalities include MRI and MRCP. Axial image in T weighted sequence shows a dot hypo intense signal in CBD around which the bile signals are hyperintense. MR cholangiography shows intra ductal worms as linear hypo intense filling defects.¹⁴

ERCP is very useful investigational modality not only because its major therapeutic potential but also it permits direct visualization of the worms in the duodenum and across the papilla and helps in radiographic demonstration of the worms in the biliary tract. The worms in the duct appear as smooth, linear filling defects with tapering ends.¹⁵

Various therapeutic modalities can be applied in management of hepatobiliary ascariasis, including conservative approach, endoscopic extraction and surgical intervention. Majority of the patients with uncomplicated biliary ascariasis will respond to conservative management.¹⁴ Intervention is required in a small proportion of patients under the following circumstances.¹⁶

1. Those critically ill with pyogenic cholangitis or unresolving cholecystitis.
2. Worm fails to leave the biliary tree within four weeks as by that time they are presumed to be dead and need extraction.
3. Worms's co-existent with stones.
4. Associated liver abscess.

In our case patient presented with concomitant stone and worm in CBD. Patient underwent open choledocolithotomy and a live worm about 15 cm long along with two stones 7 mm and 9 mm extracted. Post op period was uneventful. T tube removed after fourteen days. We have done surgical intervention on patient's demand. However endoscopic extraction is one of the options. Laparoscopic extraction of worms and stone has been done successfully.¹⁷

CONCLUSION: CBD stone with ascariasis should be considered in patient complaining of pain abdomen and other biliary symptoms in post-cholecystectomy and post choledocolithotomy patients. Carefully done abdominal ultrasonography reveal Biliary ascariasis and co existent stone with high accuracy.

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