

Hepato Biliary Ascariasis with Pancreatitis in a Young Child

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Abstract

Ascariasis is the most common helminthic infestation in the tropical countries and hepatobiliary complications are less common in children. We report a young girl who presented with acute abdomen due to hepato biliary ascariasis with pancreatitis managed by endotherapy using forward view gastroscop.

Case Report

5 years old female child presented with acute onset of upper abdominal pain, aggravated by food intake with stooping forward of 2 days duration associated with one episode of bilious vomiting containing round worm. There was no history of drug intake, trauma. Clinically she was afebrile, anicteric, undernourished, anemic with weight and height for age less than 3 SD. Abdominal examination showed tenderness in right hypochondrium. Other systems were normal. Provisional diagnosis of biliary ascariasis was considered and investigated. Investigations showed Hb 10.2 gm/dl, microcytic anemia, total blood count 11,200 cells/mm³, polymorphs 66%, lymphocytes 17%, eosinophils 17%, serum amylase 750 IU/L, lipase 1267 IU/L Blood sugar, renal function tests, liver function tests were normal. Chest X ray was normal. Ultrasound abdomen showed mild hepatosplenomegaly, ascarial worms in gall bladder, right hepatic and left hepatic ducts. She was treated with intravenous fluids, antibiotic and antispasmodic. As she did not respond to conservative line of management, upper GI endoscopy was done using 8.8 mm olympus gastroscop under conscious sedation. On endoscopy multiple live worms were seen from ampullary orifice (Figure 1). As endoscopic retrograde cholangiography is not available in our center, to alleviate the symptoms of the young child, using biopsy forceps worms were removed and thirty four live worms were taken out from the biliary tract. She was relieved of her symptoms and was prescribed oral mebendazole with hematinics. Entire family members were dewormed along with health education. Follow up ultrasound abdomen that was done before discharge showed no worms in the biliary system.

Discussion

Ascariasis is the most common parasitic infestation in endemic areas accounting for 50-60% of pediatric admissions in the surgical emergency department. Hepato biliary and pancreatic involvement has been reported in about 10% of admissions [1]. Biliary complications have been observed in 5% of children, compared to adult population [2]. Other complications like intestinal obstruction, volvulus, and intussusception occur in children with heavy infestation. Symptoms of biliary ascariasis include biliary colic, upper abdominal pain, vomiting, fever, tender hepatomegaly, jaundice with or without pancreatitis [3].

Ultrasound abdomen is a good screening test and gives valuable information on number, viability of worms and complications if any such as hepatic abscess, cholecystitis, and pancreatitis.

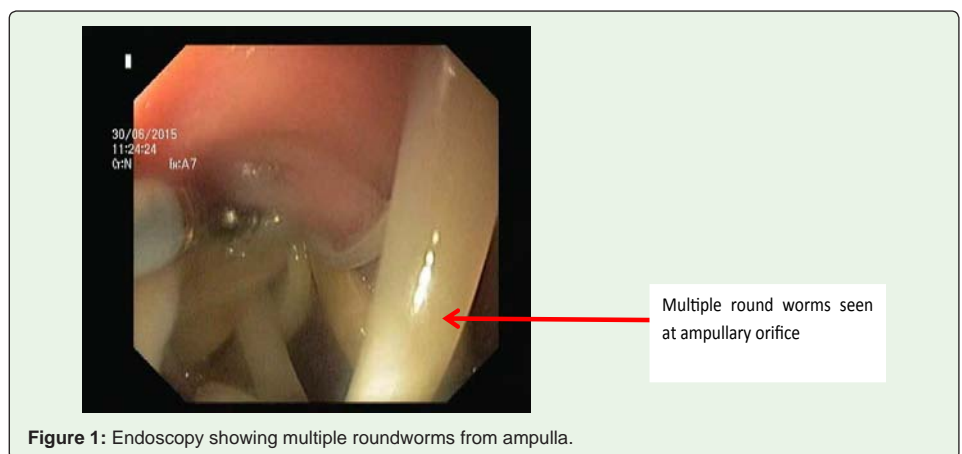


Figure 1: Endoscopy showing multiple roundworms from ampulla.

On ultrasonography, worms in the biliary system appear either as non shadowing echoes or thick echogenic tube with a central anechoic tube (inner tube sign) or without a central tube (stripe sign) or as overlapping longitudinal interface in the bile duct due to coiling of single or multiple worms called spaghetti sign [4,5]. ERCP is the best method to offer therapeutic cure in complicated cases [6]. If worms are visible outside the ampulla, it is easy to simply catch the worms and remove it by endotherapy [7].

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