

A young female with recurrent biliary pain

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A 27-year-old female from Rajasthan presented with history of recurrent biliary colic for past 6 months. She was investigated at another hospital. Her liver function test was normal. Ultrasound of the abdomen was done to exclude gall stones; it showed normal gall bladder and common bile duct. Magnetic resonance cholangiopancreatography (MRCP) showed normal common bile duct diameter and there were no filling defects. An endoscopic ultrasound (EUS) was done to look for microlithiasis. EUS revealed a linear structure in gallbladder with a central hypoechoic defect as shown in Figure 1. The structure exhibited movements during examination consistent with the presence of adult roundworm, *Ascaris lumbricoides* within the gallbladder. The patient was given albendazole and cholecystectomy was done. It confirmed presence of ascaris worm inside the gallbladder. She is asymptomatic at 1 year of follow-up.

Ascaris lumbricoides is the most common helminthic infection of the world and approximately 25% of population is affected. It is transmitted via the fecal-oral route, mainly from ingestion of water or food (vegetables or fruits) contaminated with *A. lumbricoides* eggs. Infection remains asymptomatic in majority of the infected persons. Symptoms are infrequent and may be caused by larvae migration in circulation or by adult worms migration into pancreatobiliary system.^[1] Adult worm may cause biliary colic, cholecystitis, cholangitis, pancreatitis, hepatic abscess, intestinal obstruction and acute appendicitis.^[2-4] Diagnosis of biliary ascariasis in nonendemic area requires high index of suspicion. In ultrasound or endoscopic ultrasound, *Ascaris lumbricoides* appears as long echogenic structure without producing shadow effect, as it may appear like a coil or as echogenic structure with central anechoic linear defect. In gall bladder, its zig-zag movement may be seen.^[5,6] Gall bladder ascariasis is rare, in a series of 500 hepatobiliary pancreatic diseases due to *Ascaris*; only 8 (1.6%) patients had worm in gall

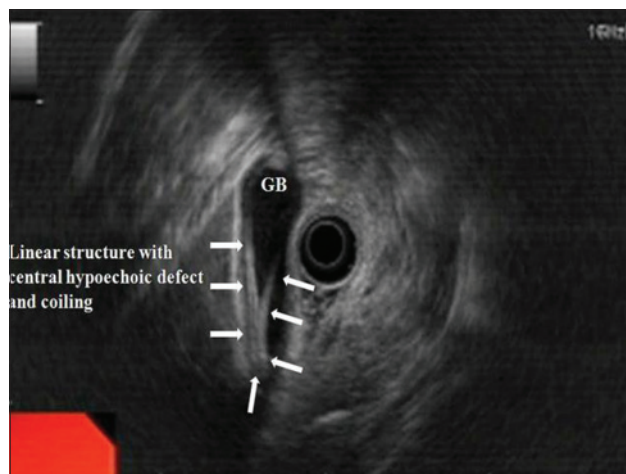


Figure 1: EUS image showing long linear echogenic structure with linear central hypoechoic defect and coiling on itself in gall bladder

bladder.^[2] Gall bladder worm generally need cholecystectomy, although conservative management (antihelminthic therapy) alone may work for some patients.^[6,7]


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