## LETTER TO EDITOR (VIEWERS CHOICE)

## **GALL BLADDER WORMS**

Gursharn Singh Narang, Suneeta Arora, Jivtesh Pahwa, Jaskaran Kaur

A 5 years old male child admitted with pain abdomen in upper abdomen associated with hepatosplenomegaly. Prior history of passage of worms in the stool was present, which on microscopic stool examination showed eggs of round worms. On investigations, liver function tests were normal. Ultrasound (USG) abdomen revealed dilated gallbladder without any evidence of cholecystitis with tubular echogenic non-shadowing image in the gallbladder lumen and common bile duct (CBD). After treating with Albendazole there was improvement in symptoms as well as disappearance of tubular image in the gall bladder on repeat USG.

Ascaris lumbricoides normally live in the lumen of small intestine (1, 2). From the intestine, the worm can invade the bile duct or pancreatic duct but invasion into the gallbladder is quite rare because of the anatomical features of the cystic duct which is narrow and tortuous (3). Biliary ascariasis is more common in females. Pregnant women may be more susceptible due to relaxant effect of hormones on the smooth muscle of the bile ducts (4, 5). The presentation of biliary ascariasis is similar to the cholelithiasis, acute cholecystitis, choledocholithiasis, acute pancreatitis and ascending cholangitis (6, 7). The round worm may be present both in the CBD and gallbladder in the same patient at a time as in our case. The ultrasound is diagnostic in biliary ascariasis. They present like linear echogenic image without acoustic shadow in the lumen of gallbladder and CBD (8,9). The findings of erratic, non directional, zigzag movements are characteristic of live worm (8). Biliary ascariasis has a good response to conservative treatment like bowel rest, antispasmodic and antihelminthic drugs. Worms within the biliary tract are not killed by the antihelminthic drugs. Successful treatment is possible if the worm returns to the small intestine where they are exposed to adequate concentration of drug. The conservative treatment fails usually in the presence of dead worm, concomitant stones or stricture which prevents the returning of worm in the duodenum (10). Endoscopic removal of worm treatment has become the treatment of choice for the CBD ascariasis in which the medical management has failed. Sphinterotomy should be avoided as it appears to predispose to recurrent infestation by the worms (10, 11). All patients who do not respond to conservative or endoscopic treatment should be treated with surgery. Our patient responded to the medical management and showed no evidence of cholecystitis or worm on follow up.

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**From:** Department of Pediatrics, S.G.R.D.M.I.S.A.R, Amritsar.

**Address for Correspondence:** Dr Gursharn Singh Narang, Associate Professor, Department of Pediatrics, SGRDMISAR, Vallah, Amritsar. Email: jivteshpahwa@rediffmail.com. Email: gsnarang321@gmail.com

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