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Letters to the Editor

Biliary parasite *(Ascaris)* as a cause of acute pancreatitis. Ultrasound diagnosis

Key words: Ascaris. *Ultrasonography. Common bile duct diseases. Parasitology. Pancreatitis.*

Dear Editor,

Ascaris lumbricoides represents the most common helminthic infection in the world. However, it is not a common parasite in our country, being even rarer to see it as a cause of acute pancreatitis and to diagnose it by ultrasound.

Case report

A 40-year-old woman, native of the , who had return from his country 15 days before, was admitted for acute pancreatitis. Laboratory test showed leukocytosis, eosinophilia, mild hipertransaminasemia (< 90 mg/dL) and normal bilirubin. An abdominal ultrasound revealed a distended and thickened-wall gallbladder and, inside it, a long linear structure showed spontaneous wave movements (Fig. 1A). It stretched by the main bile duct from the gallbladder to the papilla (Fig. 1B). Because of this finding, albendazol was started and an endoscopic retrograde cholangiopancreatography (ERCP) was performed 24 hours later in order to remove the parasite. However, the papilla was torn and no parasite was seen inside bile duct. A new ultrasound and magnetic resonance imaging confirmed it. Patient fully recovered and was discharged.

Discussion

Ascaris lumbricoides infection affects 25% of world population, especially in tropical areas, being jejunum the usual seat of adult specimens. Migration to the biliary tree results in 33% of the biliopancreatic pathology in endemic countries, although the frequency in our country is not specified. Previous interventions -cholecystectomy, ERCP- are a predisposing factor. An acute pancreatitis, as happened in our patient, is exceptional for this cause (5%), as the most common manifestation consists of biliary colic (56%), followed by cholangitis (24%), acute cholecystitis (2-13%) or even liver abscess (< 1%) (1). In our case, ultrasound made it possible to diagnose it by providing a characteristic image: a 25-30 cm-lengh and 6-8 mm-thickness structure, consisting of two hyperechogenic outer lines, two hypoechoic internal, and an echogenic center that corresponds to the parasite's digestive tract ("sign of 4 lines"). The ultrasound differential diagnosis with other biliary parasites –*Opistorchis, Clonorchis or Fasciola*– usually does not offer doubts, as they are viewed as linear or oval echogenic structures of few millimeters in length, that often get confused with lithiasis (2). Associated to albendazole, an ERCP should be performed to remove the parasite that does not come out spontaneously. During this procedure, we should try to avoid sphincterotomy, since it facilitates migration in future reinfections and, if possible, we should not use instrumentation that can break the worm because it promotes the further development of recurrent cholangitis. If ERCP fails, surgical removal is indicated (3). The rate of reinfection is 80% at 6 months because of new exposure to the parasite.

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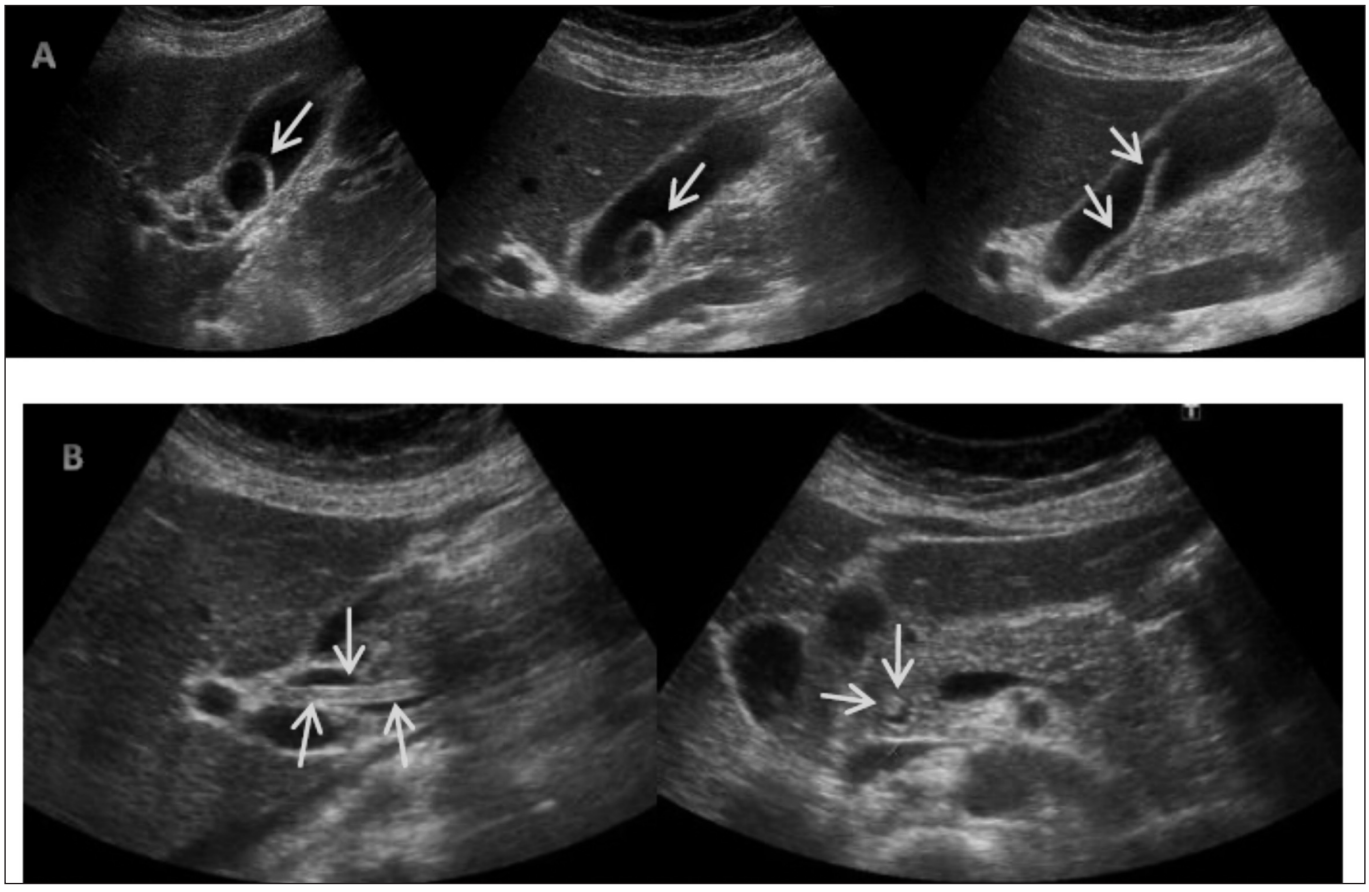

Fig. 1.

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