Intrahepatic Biliary Paracoccidioidomycosis Mimicking Cholangiocarcinoma

Klaus Steinbrück1, Reinaldo Fernandes1, Carlos F. F. Campos2, Giuliano Bento1, Gustavo Stoduto1, Thomas Auel1

1) Hepatobiliary Surgery Unit; 2) Department of Pathology, Bonsucesso Federal Hospital – Health Ministry, Rio de Janeiro, Brazil

A 53-year-old man from a rural area of Rio de Janeiro, Brazil was admitted with jaundice, pruritus, acholic stools, choluria and weight loss. Physical examination revealed a painful palpable left liver lobe in the epigastrium. No peripheral lymphadenopathy was detected. Anemia and elevated serum bilirubin (13.8 mg/dl) and liver enzymes were present. Thorax x-ray was normal. MRI showed left bile duct dilatation (Fig. 1, axial MR T2-weighted) above the hepatic confluence, without extrinsic compression or perihilar lymphadenomegaly. Two years earlier, he had been diagnosed with ganglionar paracoccidioidomycosis (PCM) located in the cervical region. The patient has been under treatment since with Itraconazole 200 mg/day.

An early stage intrahepatic cholangiocarcinoma was suspected and the patient was referred to surgery. Left hepatectomy with common bile duct resection and Roux-en-Y biliary-enteroanastomosis reconstruction was performed. He was discharged without complications, after seven days. Histopathological evaluation revealed areas of cavitation and biliary abscesses in the liver. In the abscesses, fungal elements with morphological characteristics compatible with *Paracoccidioides brasiliensis* were present (Fig. 2, biliary necrosis containing spherical structures with budding, Grocott’s methenamine silver stain x400). The diagnosis was biliary PCM and treatment with Itraconazole was resumed. The patient is doing well, 38 months after the partial hepatectomy.

Paracoccidioidomycosis is a systemic mycosis originally described by Adolfo Lutz in 1908 [1]. It is autochthonous in Latin America and affects mainly males in their productive years. The etiologic agent is *Paracoccidioides brasiliensis* [2]. Disease presentation can be acute (3-5% of cases) or chronic (90%). The latter can be unifocal or multifocal, when more than one organ is affected, usually lungs, oropharyngeal mucosa and skin [2,3].

Liver involvement in PCM is frequently seen in a chronic multifocal form. The extrinsic compression of common bile duct by lymph nodes is followed by jaundice. Other causes of jaundice are intraluminal granulomatous lesion of the common bile duct, blastomyecotic hepatitis or pancreatic PCM [4-6].

In our patient, misdiagnosis was prompted by the following facts: i) intrahepatic biliary duct involvement is not a common presentation for biliary obstruction in PCM; ii) abdominal or peripheral lymphadenopathy was absent; iii) pulmonary manifestations were absent (usually present in 90% of patients with chronic disease) [2]; iv) symptoms and imaging suggested cholangiocarcinoma.

Although PCM rarely involves intrahepatic bile ducts, in endemic areas it should be considered in the differential of obstructive jaundice.

Corresponding author: Klaus Steinbrück, steinbruck@gmail.com

Conflicts of interest: None to declare.

REFERENCES