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Fungal cholangitis of the hepatobiliary tract: a case report

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Key words: Infectious cholangitis. Fungal cholangitis. *Candida.* Primary sclerosing cholangitis.

Dear Editor,

We report the case of a 52-year-old male diagnosed with primary sclerosing cholangitis, mainly of the extrahepatic bile duct, with a long evolution. After liver transplantation, the explanted liver showed necrosis of the bile duct wall, with fungal structures inside the bile duct that was compatible with *Candida.* The patient was treated with mesalazine and ursodeoxycholic acid and does not have a stent in the bile duct.

Microscopically, an intense chronic inflammation with necrosis of the epithelium and part of the wall of the common bile duct was observed at the level of the hepatic hilum. Furthermore, fungi were present (Fig. 1A-C), which were identified using the Grocott's methenamine silver and periodic acid-Schiff-diastase (PAS-D) histochemical techniques. Elongated hyphae with morphological characteristics of the *Candida* type were observed (Fig. 1D).

Discussion

Fungal cholangitis is an infrequent pathology that is usually caused by fungi of the *Candida* family, although it may also be due to others such as *Cryptococcus,*

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Histoplasma or *Mucor.*

Candida species are part of the microbial flora of the normal gastrointestinal tract and are the most frequent cause of fungal cholangitis. The pathogenesis is unclear, although it is thought that it is due to a direct invasion of the common bile duct from the duodenum (1,2). The diagnosis of fungal cholangitis is based on the clinical history and the observation of biliary fungal colonies (3).

A state of immunosuppression, which includes chemotherapy, immunosuppressive drugs, malignant hematological diseases, acquired immunodeficiency syndrome (AIDS) and diabetes mellitus are general predisposing factors of fungal cholangitis. The use of broad-spectrum antibiotics is also an important risk factor (4).

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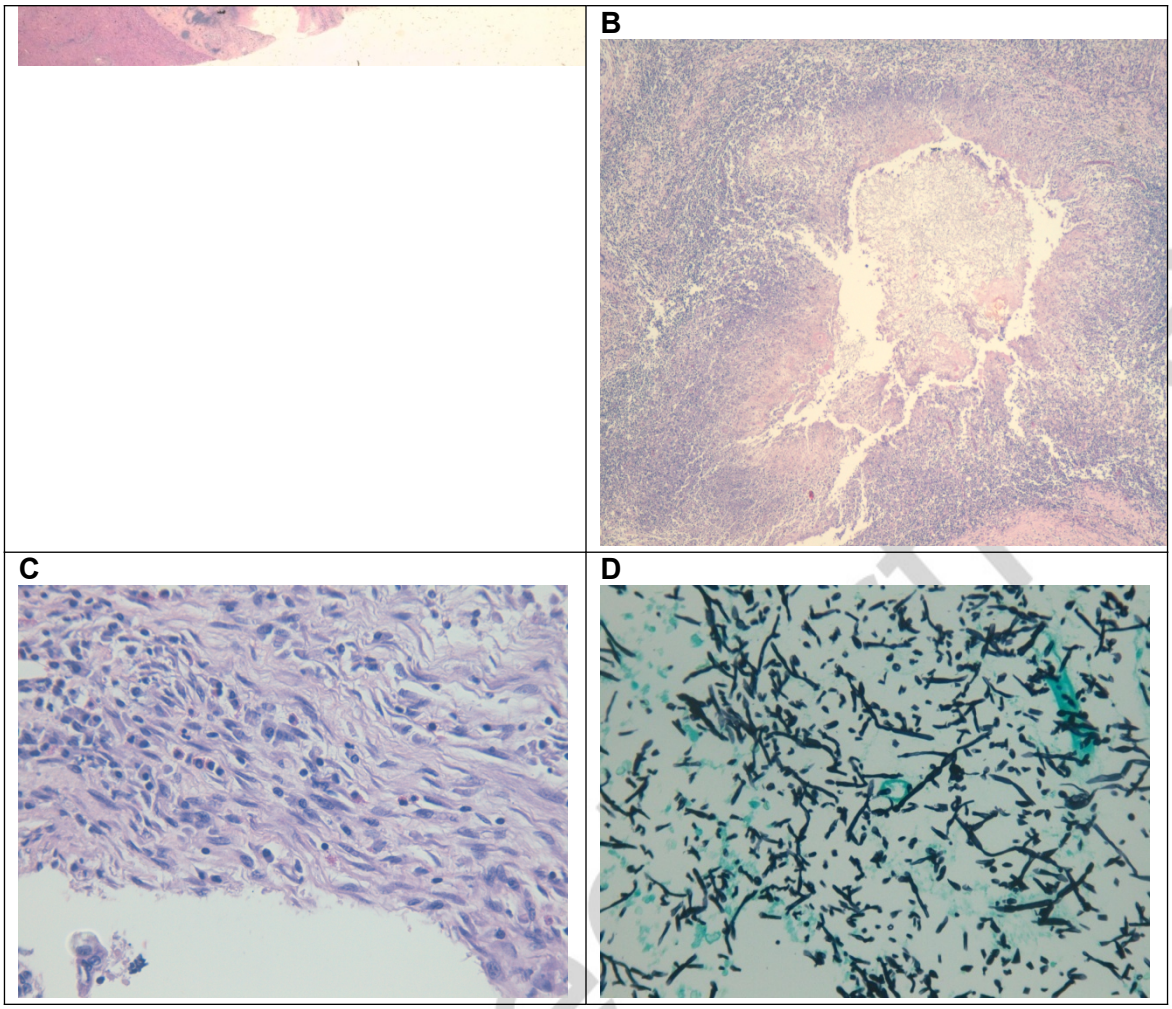

Fig. 1. A. Panoramic view of the common bile duct, with effacement of the wall of the bile duct and inflammation (HE). B. Detail of the inflammation and necrosis of the bile duct wall, with "fungal balls" inside (HE 40). C. Detail of the chronic inflammation of the wall, which is made up of lymphocytes, plasma cells and scattered eosinophils. Erosion of the epithelium of the bile duct (HE 400). D. Staining of the hyphae using Grocott's methenamine silver stain (400).

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