Lymphoepithelioma-like cholangiocarcinoma mimicking hepatocellular carcinoma

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Dear Editor,
A 50-year-old woman presented with a hepatic nodule incidentally found by abdominal ultrasonography. Her medical history showed recurrent tonsillitis at an early age. Laboratory investigations including virological tests and tumor markers were all within normal range. Contrast-enhanced Magnetic Resonance Imaging (MRI) revealed a 1.6cm × 1.8cm hepatic nodule in segment IV, with a homogeneous wash-in during the arterial phase followed by a wash-out in portal-venous phase, and hypointensity in hepatospecific phase (Fig. 1A-C). The patient underwent laparoscopic resection. Pathology revealed nests and cords of neplastic cells with rare areas of apparent gland formation and mixed inflammatory. In situ hybridization using an EBV-encoded RNAs (EBER) revealed extensive reactivity in tumor cell nuclei (Fig. 1D), supporting a diagnosis of Lymphoepithelioma-like cholangiocarcinoma (LEL-ICC). The patient had no symptoms during the 24-month follow-up and had good quality of life.

DISCUSSION
Lymphoepithelioma-like carcinoma (LELC) is a rare tumor defined by histopathological features that comprise undifferentiated epithelial cells with prominent lymphoid infiltration. LELC occurs in various organs, including the gastrointestinal tract, lungs, and urogenital system. This sarcoma has a strong association with Epstein-Barr virus (EBV), but EBER was negative in most cases of LELC from the head and neck skin. Most of these have been benign, with some malignant instances noted as well, little capacity for lymphatic or metastatic involvement. Preoperative diagnosis of LELC is difficult due to the lack of specific features regarding the laboratory test results and imaging findings. At present, the diagnosis of LELC mainly depends on the histopathologic and immunohistochemical examinations.
Hepatic LELC can be divided into two types: lymphoepithelioma-like intrahepatic cholangiocarcinoma (LEL-ICC) and lymphoepithelioma-like hepatocellular carcinoma (LEL-HCC). In our case, this tumor exhibited imaging characteristics of hepatocellular carcinoma (HCC), often leading to missed or misdiagnoses. The combination of imaging manifestations and clinical features is more helpful for the diagnosis of LEL-ICC. Therefore, when patients showed recurrent tonsillitis at an early age, AFP did not change significantly, and there was no previous history of hepatitis B. In such scenario, diagnosis of LEL-ICC should be considered.

Reference
Fig. 1. 50-year-old woman with lymphoepithelioma-like cholangiocarcinoma (LEL-ICC). A. Contrast-enhanced MRI revealed arterial phase wash-in (arrow). B. During the portal-venous phase wash-out (arrow). C. During hypointensity in hepatospecific phase (arrow). D. Epstein-Barr virus-encoded RNA in situ hybridization shows diffuse positive staining in tumor cells (200×).