Image of the Month

Cinzia Nobili, MD; Edoardo Rosso, MD; Elie Oussoultzoglou, MD; Selenia Casnedi, MD; Daniel Jaeck, MD, PhD, FRCS; Philippe Bachellier, MD, PhD

27-YEAR-OLD, HEALTHY-APPEARING WOMAN presented with vague abdominal discomfort. Her medical history included only oral contraception. Physical examination results were remarkable for a palpable mass of mild tenderness in the upper right quadrant. Serum levels of tumor markers (carcinoembryonic antigen, carbohydrate antigen 19-9, and α -fetoprotein) and serology results for echinococcosis were negative. Abdominal computed tomography and hepatic magnetic resonance imaging showed a 9-cm-diameter, solid, heterogeneous, capsulated mass with scattered calcifications that had developed from the inferior part of segment VI of the liver (**Figure 1**). Gastroscopy and colonoscopy results were normal. The patient underwent liver resection by bisegmentectomy of segments V and VI, including hepatic pedicle lymphadenectomy.

Gross examination of the surgical specimen revealed a solid, nodular, well-circumscribed, white mass. The cut surface was firm and had a homogeneous appearance with-

Author Affiliations: Centre de Chirurgie Viscérale et de Transplantation (Drs Nobili, Rosso, Oussoultzoglou, Jaeck, and Bachellier) and Service d'Anatomie Pathologique (Dr Casnedi), Hôpital de Hautepierre, Hôpitaux Universitaires de Strasbourg, Université Louis Pasteur, Strasbourg, France.



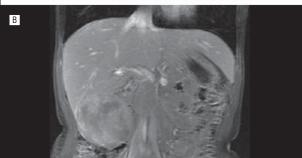


Figure 1. A contrast-enhanced abdominal computed tomographic scan (A) and a hepatic magnetic resonance image (B) showing a large, heterogeneous, solid, capsulated mass. A, Black arrows indicate intratumoral and peritumoral calcifications.

out any evidence of necrosis or hemorrhage. Histologically, the lesion was characterized by a thin fibrous capsule and was composed of a proliferation of spindle cells with small nuclei and a collagen-rich stroma. Within the fibrocollagenous tissue, there were several dystrophic calcifications, psammoma bodies, lymphoid aggregates, and a few foamy macrophages (**Figure 2**). Immunohistochemical staining showed negative results for antibodies against S-100 protein, caldesmon, smooth muscle actin, desmin, CD34, CD117 (c-kit), anaplastic lymphoma kinase protein, and keratin. Stains were focally positive for β -catenin. Proliferation index Ki67 was inferior to 1%. No lymph node metastasis was observed.

What Is the Diagnosis?

- A. Calcifying liver metastasis
- B. Intrahepatic cholangiocarcinoma
- C. Hepatic calcifying fibrous pseudotumor
- D. Focal nodular hyperplasia

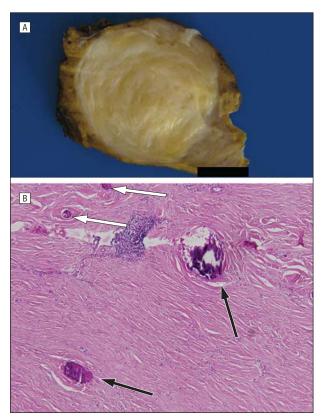


Figure 2. The surgical specimen on gross examination (A) and a high-power photomicrograph showing dense collagen bundles, dystrophic calcifications (white arrows), and psammoma bodies (black arrows) (hematoxylin-eosin, original magnification $\times 100$) (B).