Answer

Hepatic Calcifying Fibrous Pseudotumor

We report the first case, to our knowledge, of calcifying fibrous pseudotumor (CFP) arising in the liver. The first report of benign lesions characterized by fibrocollagenous tissue with dystrophic calcifications and a variable inflammatory infiltrate was made in 1988 by Rosenthal and Abdul-Karim[1]; a few years later, Fetsch et al[2] renamed it *calcifying fibrous pseudotumor*. A possible relationship with inflammatory myofibroblastic tumors has been proposed as an etiological mechanism, but recent evidence has rejected this hypothesis because of the different immunostaining patterns.[3] The CFPs are characterized by negative staining results for anaplastic lymphoma kinase protein, S-100 protein, smooth muscle actin, desmin, CD34, and CD117 (c-kit).[3]

Most CFPs reported in the literature occurred in women. Saglam et al[4] described a young woman with CFP nodules speared throughout the pelvic peritoneum in association with small foci of endometriosis, suggesting that female hormones may play a role in the pathogenesis of CFP. Single or multiple CFPs occur more commonly in subcutaneous and deep soft tissues of the trunk, limbs, and neck and in serosal membranes such as pleura, pericardium, and peritoneum. However, CFP has been reported in unusual sites such as the spermatic cord, the epididymis, and the orbit. Clinically, CFP can be symptomatic or asymptomatic. Symptoms include vague abdominal discomfort, long-lasting pain due to the compression of neighboring structures, and acute abdominal pain due to peritonitis.[5] Preoperative diagnosis of CFP is difficult not only owing to its rarity but particularly for the absence of pathognomonic radiological signs. In most cases, CFPs appear as a solid mass with scattered atypical calcifications on computed tomography or magnetic resonance imaging. In our case, the preoperative computed tomographic scan showed a single large mass of heterogeneous attenuation with extensive spherical and clustered calcifications. The magnetic resonance image demonstrated a well-circumscribed tumor with signal intensity suggesting fibrosis and high collagen content. Such radiological findings were confirmed by the final histology, which showed a well-circumscribed tumor composed of fibrocollagenous tissue and several dystrophic calcifications. Therefore, the differential diagnosis should consider calcifying liver metastasis from pulmonary, colorectal, ovarian, mammary, gastric, or prostatic cancers, melanoma, mesenchymal hepatic tumors, hepatic gastrointestinal stromal tumors, some forms of intrahepatic cholangiocarcinoma, hepatic adenoma, or focal nodular hyperplasia. In our case, based on the radiological characteristics (on magnetic resonance imaging particularly), the diagnosis of fibrolamellar carcinoma was made, justifying surgical excision with lymphadenectomy.

The CFP is considered a benign tumor. Several reports indicate a favorable clinical course, but recurrence, even if unusual, has been reported.[2,3,6,7]

In conclusion, we show that CFP can occasionally occur in the liver. Therefore, differential diagnosis of solid hepatic tumors with calcifications should include CFPs. Surgical resection with clear margins seems indicated owing to the risk of local recurrence.

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Correspondence: Philippe Bachellier, MD, PhD, Centre de Chirurgie Viscérale et de Transplantation, Hôpital de Hautepierre, Hôpitaux Universitaires de Strasbourg, Université Louis Pasteur, Avenue Molière, 67200 Strasbourg, France (philippe.bachellier@chru-strasbourg.fr).
Author Contributions: *Study concept and design:* Rosso. *Acquisition of data:* Nobili. *Analysis and interpretation of data:* Rosso, Oussoultzoglou, Casnedi, Jaeck, and Bachellier. *Drafting of the manuscript:* Nobili, Rosso, Oussoultzoglou, and Casnedi. *Critical revision of the manuscript for important intellectual content:* Rosso, Oussoultzoglou, Jaeck, and Bachellier. *Study supervision:* Oussoultzoglou, Jaeck, and Bachellier.
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