Case	(179) Abscess or tumor? it is not always easy.
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CASE PRESENTATION

An 80-year-old woman with a history of previous tuberculosis, Crohn's disease, and ankylosing spondylitis presented to the Emergency Department with a 10-day history of general malaise, right upper quadrant pain, and nausea.

The patient was receiving infliximab for her Crohn´s disease. No fever was present. Laboratory studies didn´t show significant alterations.

Given the possibility of a liver abscess in an immunocompromised patient (due to the biological treatment), an abdominal ultrasound (US) was requested. US showed a nodular lobulated, hypoechoic 5-cm lesion without posterior acoustic enhancement, of possible solid nature. A multiphase abdominal CT was performed to better characterize the liver lesion. In the arterial phase of the CT, the lesion was barely visible, with a subtle peripheral enhancement.

In the venous phase, the lesion was more conspicuous, showing a hypodense behavior and a mild peripheral enhancement. In the delayed phase (3 minutes), the peripheral rim of the lesion became much more evident.

DISCUSSION

When diagnosing a focal liver lesion in an immunocompromised patient, the main differential diagnosis, from a radiological point of view, basically includes tumor and infections.

Our first suspicion was that the focal liver lesion corresponded to a hypovascular tumor, without the typical uptake patterns of liver angioma or classic hepatocellular carcinoma. Because the patient did not have a known primary tumor, metastases were initially excluded.

The possibility of intrahepatic cholangiocarcinoma was also taken into account in our patient for two reasons:

1) because of the association with the patient´s Crohn's disease, which has an increased incidence of sclerosing cholangitis and cholangiocarcinoma

2) because of the imaging features: hypovascular lesion with late peripheral contrast uptake, even in the absence of bile tree dilatation or hepatic capsule retraction.

However, a hepatic abscess (our second diagnostic hypothesis) could not be completely excluded due to:

1) the nonspecific clinical presentation of liver abscesses in immunocompromised patients, in whom the classical symptoms and signs of infection may not always be present.

2) the broad spectrum of liver abscesses in both US and CT, due to the different behaviors that may manifest, according to their stage of development, their characteristics and etiologies. Finally, an image-guided biopsy was performed and confirmed the pathological diagnosis of intrahepatic cholangiocarcinoma.

CONCLUSION

The differential diagnosis between abscess or tumor is not always easy. Clinical history, diseases and treatments may help but a complete imaging study will be required and may not be conclusive either. Intrahepatic cholangiocarcinoma in a patient with Crohn's disease treated with Infliximab.

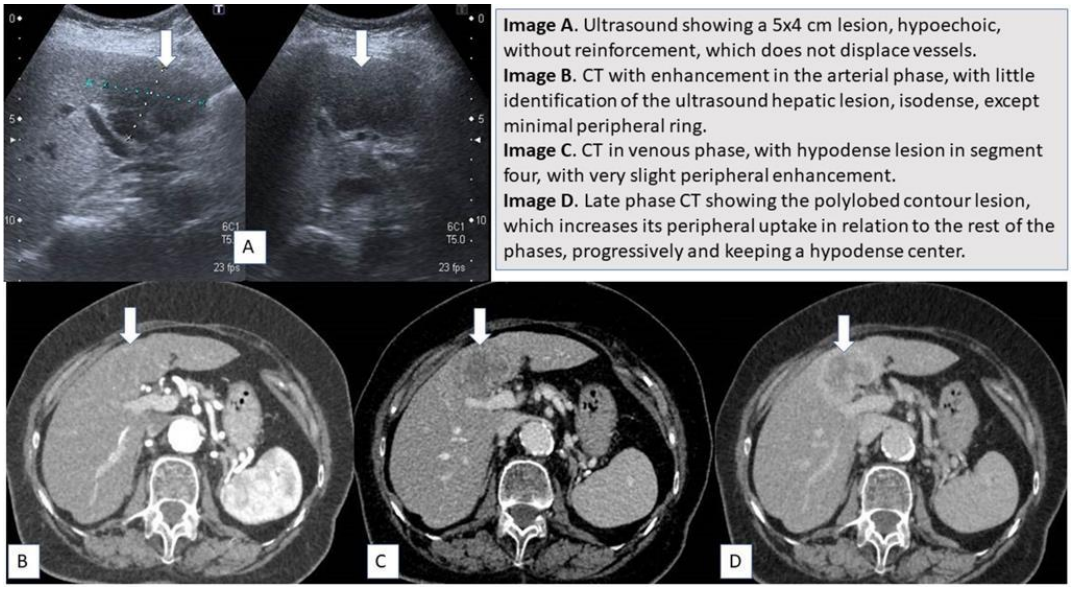

Image A. Ultrasound showing a 5x4 cm lesion, hypoechoic, without reinforcement, which does not displace vessels.
Image B. CT with enhancement in the arterial phase, with little identification of the ultrasound hepatic lesion, isodense, except minimal peripheral ring.
Image C. CT in venous phase, with hypodense lesion in segment four, with very slight peripheral enhancement.
Image D. Late phase CT showing the polylobed contour lesion, which increases its peripheral uptake in relation to the rest of the phases, progressively and keeping a hypodense center.

BIBLIOGRAPHY

- Menias CO, Surabhi VR, Prasad SR, Wang HL, Narra VR, Chintapalli KN. Mimics of cholangiocarcinoma: spectrum of disease. Radiographics 2008; 28:1115-1129

- Mortelé K, Segatto E, Ros P. The Infected Liver: Radiologic-Pathologic Correlation. RadioGraphics 2004; 24:937-955.