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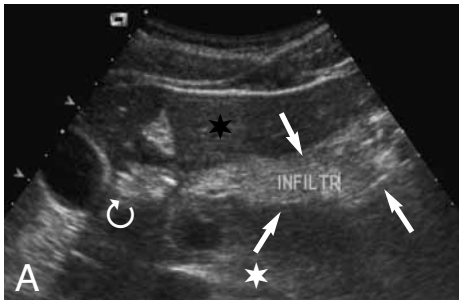
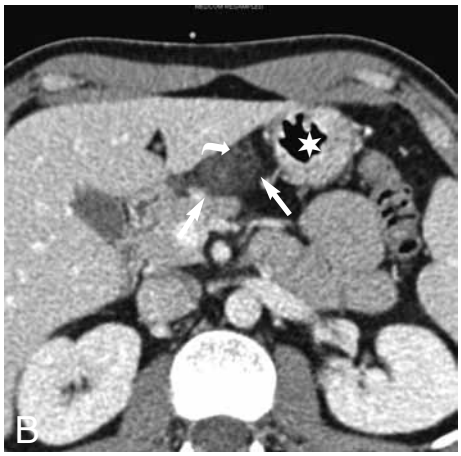
IMAGES IN CLINICAL RADIOLOGY





Focal infarction of lesser omentum

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A 25-year-old man came to the emergency department complaining of continuous right para-umbilical pain radiating to the epigastric mid-line since the previous night. Pain was associated with tenderness. He had no fever and the rest of the physical examination was normal. Laboratory studies showed a normal white blood cell count and C-reactive protein level was 11 mg/L (normal < 10 mg/L). Pain was relieved by paracetamol.

Abdominal ultrasound (Fig. A) showed a painful incompressible hyperechoic pre-pancreatic ovoid mass (white arrows) about 4 centimeters wide, with low background attenuation, located on the epigastric mid-line between the liver (black star), the pancreas (white star), and left to the duodenum (curved arrow).

MDCT (Fig. B) confirmed a slightly hyperdense mass (white arrows) of 2,8 x 1,7 x 3,5 cm with well-defined contours and containing hyperdense streaks (curved arrow), localised in the lesser omentum – contiguous to gastric arteries – on different multiplanar reformated views, along the stomach lesser curvature (white star). The diagnosis of infarction of the lesser omentum was proposed, and conservative treatment was introduced. He received oral analgesic and antiinflammatory drugs, and became asymptomatic in a few days.

Comment

In 1999, van Breda Vriesmann et al were the first in defining the concept of intraperitoneal fat focal infarction (IFFI). They described different sites of focal fatty tissue necrosis with similar clinical signs, etiology, radiological features, prognosis and treatment. In the literature, most of the cases of IFFI concern the greater omentum and epiploic appendages, by torsion and/or infarction of fatty appendages. The differential diagnosis is to be made with diverticulitis, appencitis, cholecystitis or gynecological pathologies. In our case, the differential diagnosis included pancreatitis and gastro-duodenal diseases.

Usually patients with infarction of lesser omentum present epigastric pain with tenderness and sometimes signs of peritoneal irritation. Biological parameters are mild elevated white blood cell count and C-reactive protein or even normal.

Like in this case, the ultrasound images show an incompressible, painful, moderatly hyperechogeneic and well-circumscribed epigastric mass (Fig. A). Computed tomography images also show a well-circonscribed slightly hyperdense mass, along the lesser curvature of the stomach, in the vicinity of the prancreas, containing hyperdense streaks corresponding to fibrous bands and/or dilated thrombosed veins (Fig. B).

US and CT findings contribute to differentiate from other primary bening masses in the lesser omentum like stromal tumor, hemangioma, neurogenic tumor and teratoma, as well as malignant processes such as lymphoma, metastatic diseases and sarcomas.

In case of doubt, an imaging follow-up may be necessary. Any kind of IFFI presents the same clinical expression, evolution and conservative treatment (oral analgesic and antiinflammatory drugs).

Reference

1. Contribution of US and CT for diagnosis of intraperitoneal focal fat infarction (IFFI): a pictorial review. *JBR–BTR*, 2010, 93: 171-184.

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