Appendagitis of the lesser omentum – an uncommon cause of acute abdominal pain

Appendagite du petit épiploon – une cause méconnue de douleurs abdominales aiguës

Abbreviations
CT computed tomography
US ultrasonography
IFFI intraabdominal fat focal infarction

Observation
A 33-year-old woman was admitted to the emergency for acute upper abdominal pain. She had no significant medical history past and no recent traumatic event. The physical examination found an epigastric tenderness without abdominal contracture. Laboratory studies showed a mild elevation of white blood cells (13,000 per cubic millimeter) and C-reactive protein level was normal (inferior to 5 mg/mL). Hepatic and pancreatic tests were also normal. Upper gastrointestinal endoscopy was normal. Abdominal ultrasonography (US) found a well-defined hyperechoic, incompressible, painful and hyperattenuating ovoid mass between the left hepatic lobe, the lesser gastric curvature and the pancreatic body (figure 1). Abdominal contrast-enhanced computed tomography (CT) with multiplanar reformatted (MPR) views confirmed the presence of a well-circumscribed ovoid fatty inflammatory mass located in site of the lesser omentum between the left hepatic lobe and the lesser gastric curvature (figure 2) with peritoneal fat infiltration surrounding and hyperattenuating streaks. We proposed the diagnosis of intraperitoneal (IFFI) fat focal infarction of the lesser omentum, so-called appendagitis of the lesser omentum, with conservative management. The patient was treated with short-term oral analgesic drug and symptoms quickly disappeared.

Discussion
Appendagitis of the lesser omentum is a rare form of IFFI (Intraperitoneal Fat Focal Infarction). This term was first introduced by van Breda Vriesman et al. in 1999 and regroups acute appendagitis and infarction of the greater omentum. The common denominator is a focal fatty and inflammatory tissue necrosis differing only in their anatomical location and dimensions [1–9]. The lesser omentum is a peritoneal reflection connecting the lesser gastric curvature and the proximal duodenum with the liver. The thickness of the lesser omentum is variable with three distinct portions called pars condensa, pars flaccida and pars vasculosa containing hepatic pedicle [5] (figure 3). Reported cases of appendagitis of the lesser omentum are rare [1,2,10–12]. The first case of IFFI of the lesser omentum was described by Coulier et al. in 2004 [1]. Clinical symptoms include upper abdominal pain located in the epigastric area and focal tenderness. Laboratory tests are normal or subnormal with mild elevated white blood cell count and C-protein reactive level. Differential diagnosis includes pancreatitis, gastroduodenal ulcer, symptomatic gallstone disease. Our case presents many similarities with other reported cases in the literature. US and CT findings are a painful, incompressible, well-circumscribed ovoid mass located in the lesser omentum area embedded between the left hepatic lobe and the lesser gastric curvature, hyperechoic on US images with fatty inflammatory features on CT views containing hyperattenuating streaks [4–8]. Accurate diagnosis is required to avoid unnecessary surgery. Conservative medical treatment with oral analgesic or anti-inflammatory drugs allows a rapid resolution of symptoms.

In conclusion, we report a new case of appendagitis of the lesser omentum mimicking upper abdominal emergency. Better knowledge of IFFI features should avoid inappropriate invasive management.
Figure 2

Axial (a), sagittal oblique (b) and coronal (c) contrast-enhanced CT MPR views confirm the presence of a well-circumscribed fatty inflammatory mass located in the lesser omentum (white arrow) between the left hepatic lobe and the stomach (white star), containing hyperattenuating streaks and corresponding to IFFI of the lesser omentum.


**FIGURE 3**

Drawing of the anatomy of the lesser omentum. The lesser omentum consists in a peritoneal reflection and connects the lesser gastric curvature and the proximal duodenum with the liver. According to thickness, it can be divided in three portions: pars condensæ (PC), pars flaccida (PF) and pars vasculosa (PVA) containing hepatic pedicle. (PV = portal vein, CBD = common bile duct, HA = hepatic artery)

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**References**


Brice Robert, Cyril Chivot, Thierry Yzet
University of Picardy, Amiens North hospital, department of digestive radiology, diagnostic imaging, place Victor-Pauchet, 80054 Amiens cedex 01, France

Correspondence: Brice Robert, university of Picardy, Amiens North Hospital, department of digestive radiology, diagnostic imaging, place Victor-Pauchet, 80054 Amiens cedex 01, France
brice.robert@chu-amiens.fr
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**Révision critique des prescriptions médicamenteuses par une collaboration médecin-pharmacien chez le sujet âgé hospitalisé : l’absence d’indication est la cible principale**

Medication review by pharmacist-geriatrician collaboration for elderly inpatients: The absence of drug indication is the main target

La révision critique de l’ordonnance et l’optimisation des la prescription des médicaments est un enjeu important de la prise en charge de malades âgés hospitalisés. Ces malades complexes ont des pathologies multiples, reçoivent un nombre important de médicaments et sont particulièrement exposés au risque d’effet indésirables des médicaments. Une riche littérature scientifique montre qu’environ la moitié des effets indésirables des médicaments sont évitables dans cette population [1]. Nous avons mené une étude visant à optimiser la prescription médicamenteuse chez des malades âgés hospitalisés en gériatrie.