LETTER / Abdominal imaging

Spontaneous and rapid healing of massive symptomatic postoperative right-sided infarction of the greater omentum

Keywords Greater omentum; Omental infarct; Postoperative complication; Abdomen; Computed tomography (CT)

Dear Editor,

Intraperitoneal focal fat infarction (IFFI) includes torsion and/or infarction of the greater omentum (GO) or epiploic appendages [1]. Rarely, IFFI may involve the falciform ligament, lesser omentum and lipomatous appendages of the parietal peritoneum [2]. We report an unusual case of rapid and complete spontaneous resorption of a massive symptomatic IFFI of the GO developing 13 days after surgical resection of the right colon.

A 76-year-old man presented with pain in the right upper quadrant 13 days after uncomplicated celioscopic resection of a T2N0M0 right colon adenocarcinoma. C-reactive protein serum level was 207 mg/L (normal < 5 mg/L). Contrast-enhanced computed tomography (CT) revealed a 10.5 × 7.6 × 7.2 cm, ovoid lipomatous mass with central collections in the right upper quadrant. CT findings were consistent with massive infarction of the GO (Fig. 1). The diagnosis was further supported by the disappearance of the GO from its preoperative prehepatic location and close relationship with the gastroepiploic vessels. The patient was treated conservatively. Symptoms disappeared and C-reactive protein returned to 17 mg/L eight days later. Three weeks later, CT revealed substantial volume reduction of the mass. The central fluid collections had disappeared. The mass was now distinctly surrounded by a two-layer enhancing pseudocapsule (Fig. 2). Three months later the lesion had nearly completely resolved and 6 months later the lesion was not visible any more on CT.

Figure 1. Contrast-enhanced abdominal MDCT images in axial (A), sagittal (B) and coronal (C) planes show a massive (10.5 × 7.6 × 7.2 cm) ovoid necrotic lipomatous mass in the right upper quadrant. The lesion has typical appearance of massive infarction of a portion of the greater omentum (GO) and contains serpiginous fluid collections. Comparison between preoperative (D) and postoperative (E) views confirms disappearance of the GO from its initial location in the prehepatic area. Volume rendering view (F) confirms close relationship between necrotic avascular mass and gastroepiploic vessels.
Segmental infarction and/or torsion of the GO mimics surgical emergencies. Its right portion is concerned in more than 90% of cases with a clear male predominance. The reason is unknown [1]. However, the fact that the frequent winding of the GO in the subphrenic and prehepatic projection is nearly an exclusive male feature, as observed in our patient, could be an explanation [3]. Anyway suggestive CT features allow the diagnosis [1] so that patients are treated conservatively. Surgery may be performed in patients with ambiguous imaging findings or worsening clinical condition. Little is known about the natural changes with time of IFFI of the GO [1]. The entity may also complicate abdominopelvic surgery [4,5]. Most cases clinically manifest between day 3 and month 12 postoperative [4]. Some are asymptomatic and found incidentally on routine follow-up imaging examination [5]. Spontaneous resolution is usually observed. Partial and slow regression of the lesion has been occasionally reported [4,5] but a so complete and rapid complete regression in three months as observed in our patient has not been reported. We assume that the complete avulsion of the infarcted omental segment from its insertion, as suggested by the presence of a complete peripheral pseudo capsule, has led to a strong, resorptive foreign body reaction.

Disclosure of interest

The author declares that he has no competing interest.

References


B. Coulier

Department of Diagnostic Radiology, Clinique St Luc, Bouge 5004, Namur, Belgium

E-mail address: bcoulier.md@gmail.com

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