1130-0108/2016/108/1/51-52
Revista Española de Enfermedades Digestivas

Rev Esp Enferm Dig (Madrid)
Vol. 108, N.º 1, pp. 51-52, 2016

Letters to the Editor

Hemoperitoneum secondary to perforated inflammatory myofibroblastic tumor: A case report of an unusual complication

Key words: Inflammatory myofibroblastic tumor. Inflammatory pseudotumor. Hemoperitoneum. Tumor perforation.

Dear Editor,

We report the case of a 59-year-old male with a medical history of beta-thalassemia, who was admitted to the emergency room for a 6-days history of abdominal pain and fever. Physical examination revealed an abdominal palpable mass in right lower quadrant with tenderness. Laboratory assays showed leukocytosis with neutrophilia and hemoglobin level of 9 g/dL. An abdominal computer tomography (CT-scan) showed a complex cystic lesion in the mesentery of the small bowel with the presence of gas and air-fluid level inside. These findings pointed toward an abscessed mesenteric or intestinal tumor (Fig. 1A).

The patient underwent urgent surgery. Intraoperatively, a large tumor of 11x10x6 cm was found involving the ileum mesentery in contact with the ileo-colic trunk, it was perforated with active bleeding and caused 2 liters hemoperitoneum (Fig. 1B). Right hemicolectomy was carried out with complete mesenteric resection until the root of the segmental vessels of the superior mesenteric artery and a side-to-side ileocolic anastomosis was performed.

The patient presented post-operative anemia, requiring blood transfusion (3 units), and right paracolic intra-abdominal collection, which was resolved after percutaneous drainage and was discharged in the 20th post-operative day. Histopathologic exam-

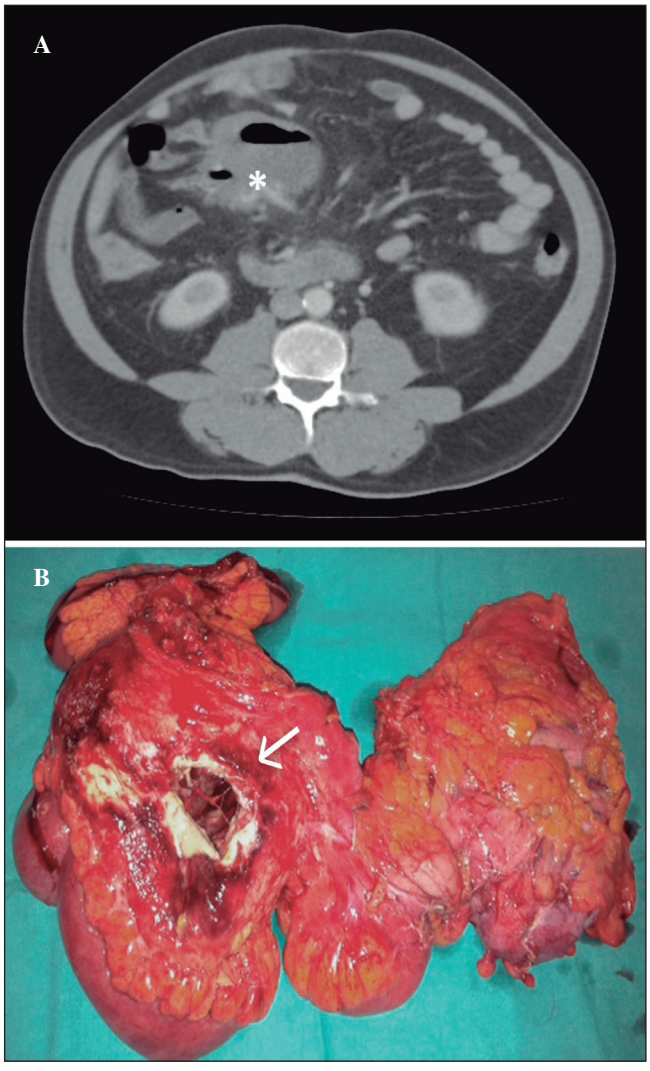

Fig. 1. A. 10x6 cm complex cystic lesion in the right lower quadrant and hypogastrium with the presence of gas and air-fluid level inside. B. Tumor in mesentery of the terminal ileum, perforated, causing hemoperioneum.

ination revealed an inflammatory myofibroblastic tumor (IMT) with clear margins. No DNA amplification of c-kit and PDGFR gene were detected.

Discussion

IMT is a rare mesenchymal tumor. It has been considered an inflammatory condition, but its invasive potential, recurrences and metastases define IMT as a neoplastic proliferation (1). It has been documented across a wide age range (2). They are most commonly found in the lung and, secondly, in the abdomen (especially in the mesentery) but also in liver, bladder and stomach (3).

The clinical presentation depends on its location. Intra-abdominal IMT usually present as a painful mass associated with weight loss and/or fever. Acute abdomen and intestinal obstruction may occur due to the compressive effect (4). However, the drilling of the tumor with hemoperitoneum, as in our case report, is an unusual complication.

Radiological features of IMTs are variable and usually nonspecific (5) and thus the definitive diagnosis relies on histo-pathological and immunohistochemical evaluations. IMT are characterized by the proliferation of spindle-shaped cells, immunohistologically positive for smooth muscle actin and desmin, and a stroma with inflammatory cells and increased vascularization (6). Approximately 30-60% of TMI are positive for ALK (anaplastic lymphoma kinase) (7).

Complete resection is the mainstay of treatment. Mesenteric or retroperitoneal IMT location, multinodular, size > 8 cm and incomplete tumor resection are poor prognostic factors (8). Recurrences are more common during the first year in IMT-ALK positive tumors. Metastases are rare (5%) and predominate in TMI-ALK negative tumors (9).

We present a case of perforated IMT with active bleeding. A rare complication that, to the best of our knowledge, has not been reported in the literature. Our finding highlights the importance of emergency surgery and the need for subsequent close follow-up of these patients.

Rafael Cholvi-Calduch, María Carmen Fernández-Moreno, María Díaz-Tobarra and Julio Calvete-Chornet

General Surgery Department. Hospital Clínico Universitario. Valencia, Spain

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