INTRODUCTION

Sclerosing encapsulating peritonitis (SEP) is a rare and curious entity of unknown etiology. Such a condition is characterized by partial or total encasement of the small bowel by a membrane of fibrous tissue. The disease presents with nonspecific clinical features of intestinal obstruction, requiring precise imaging diagnosis to guide the treatment. The present report emphasizes the importance of computed tomography in the diagnosis of this condition and its confirmation by surgical correlation.

Keywords: Peritonitis; Peritoneal fibrosis; Sclerosing encapsulating peritonitis; Computed tomography.

CASE REPORT

A male, brown, 37-year-old patient was referred by other service, complaining of diffuse abdominal pain and palpable abdominal mass for about one year, with probable diagnosis of umbilical hernia. The patient reported a previous history of paracoccidioidomycosis diagnosed for about 20 years ago, and over this period the condition progressed with voluminous ascites. Also, the patient reported a history of smoking and hepatic cirrhosis secondary to alcohol use with portal hypertension. At admission, clinical examination demonstrated a good general condition, with abdominal distension and presence of hydroaerial noise, besides a large, palpable, mobile and painful mass in the right hypochondrium and a small-sized umbilical hernia.

Abdominal computed tomography (CT) demonstrated agglomerated small bowel loops with moderate distension at the level of the mesogastrium involved by a thick and regular membrane and a moderate amount of loculated ascitic fluid in the pelvis (Figure 1).

At the third day after the admission, the patient presented obstructive acute abdomen and was submitted to exploratory laparotomy. A thick, fibrous, grayish-white membrane was intraoperatively observed, involving small bowel loops in continuation to the visceral peritoneum, similar to a cocoon means of exploratory laparotomy, with emphasis on some clinical and imaging signs which contribute to increase the suspicion level, allowing for the planning of appropriate management and avoiding unnecessary surgical approach.

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Removal of the capsule and adhesionlysis were performed in addition to segmental enterectomy.

Histological analysis of the membrane that involved the small bowel loops revealed the presence of a chronic nongranulomatous inflammatory process in association with interstitial fibrosis, with vascular ectasia on a dense connective tissue, besides ischemic necrosis and acute serositis of the resected segment of small bowel.

The patient’s evolution was unsatisfactory, with diagnosis of entero-enteral fistula and at the 17th postoperative day further surgical procedure was required for enterocutaneous fistulotomy. After the procedure, the patient evolved with recurrent infections, severe denutrition and death 46 days after admission.

DISCUSSION

SEP may be classified into primary or idiopathic and secondary. Primary SEP has already been associated with retrograde menstruation in women and with abnormality in the embryonic development of the peritoneum, with possibility of concomitant greater omentum hypoplasia and mesenteric vessels malformation. Secondary SEP is associated with predisposing factors such as peritoneal dialysis, recurrent peritonitis, infectious and noninfectious granulomatous diseases, autoimmune diseases (systemic lupus erythematosus), long term practolol therapy, abdominal catheters (Le Veen shunts), intraperitoneal chemotherapy, liver transplant, cirrhosis, endometriosis, ovarian luteinized thecoma, S-protein deficiency, dermoid cyst rupture, exposure to asbestos and to fibrogenic materials.

Almost all the cases of SEP described in the literature were intraoperatively diagnosed. A preoperative diagnosis requires a high level of clinical suspicion. Usually, the first clinical signs are nonspecific and frequently the condition cannot be recognized until the patient develops partial or total small bowel obstruction. Symptoms include pain and recur-
rent abdominal distension, nausea, vomiting, anorexia, weight loss, denutrition, recurrent episodes of acute, sub-acute or chronic intestinal obstruction, besides abdominal mass\(^{(1,4)}\).

Considering the nonspecificity of clinical findings of SEP, imaging methods become a useful tool for an early diagnosis, directly contributing in the adoption of an appropriate treatment. In patients with SEP, abdominal CT demonstrates agglomerated and distended small bowel loops concentrated in an abdominal segment, involved by a thick membrane, with peritoneal thickening, ascites and loculated fluid collections and possible peritoneal calcifications. Additionally, fibrosis leads to retraction of the mesenteric root, causing adhesions and loops conglomerate, leading to intestinal obstruction and dysfunction. Therefore, as compared with other imaging techniques, CT provides a comprehensive view of the condition as well as of any associated complication, besides helping to rule out other possible causes of intestinal obstruction\(^{(5)}\).

The treatment for SEP consists in surgical excision of the fibrotic membrane, intestinal loops adhesionlisis and resection in case of inviability of the affected intestinal segment. After appropriate surgical management, the prognosis is good, but it depends on the coexistence or not with other diseases\(^{(6)}\).

Finally, the present report highlights SEP as a rare disease, whose preoperative diagnosis depends on imaging evaluation, hence the great relevance of CT.

Considering the relevance of the preoperative imaging diagnosis of SEP, it is necessary for the radiologist to be aware and attentive to the tomographic findings suggestive of the diagnosis.

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