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Title: A Diagnostic Dilemma: Sclerosing encapsulated peritonitis

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**ABSTRACT**
Sclerosing encapsulated peritonitis is a rare entity and it is interpreted as the total or partial encasement of the abdominal organs within a thick fibrocollagenous membrane. The underlying conditions of sclerosing encapsulated peritonitis are multifactorial. Most of the cases are unfortunately diagnosed at laparotomy. It may lead to diagnostic laparotomy because of the acute abdominal signs and symptoms. Adhesiolysis of the sac is enough for the surgical treatment of sclerosing encapsulated peritonitis, unless a nonvital intestinal segment is present which requires resection. Herein we report a case of sclerosing encapsulated peritonitis with internal herniation findings detected in the preoperative abdominal CT and signs of acute abdomen.

**Keywords:** Acute abdomen; mechanical intestinal obstruction; sclerosing encapsulated peritonitis
TITLE: A Diagnostic Dilemma: Sclerosing encapsulated peritonitis

INTRODUCTION
Sclerosing encapsulated peritonitis is a rare benign cause of acute or subacute small bowel obstruction. Total or partial encasement of the abdominal organs within a thick fibrocollagenous membrane [1]. It may lead to diagnostic laparotomy because of acute abdominal signs and symptoms. Sclerosing encapsulated peritonitis may cause obstructive symptoms with negative laparotomies. Herein we report a case of sclerosing encapsulated peritonitis with internal herniation findings detected in preoperative abdominal CT and signs of acute abdomen.

CASE REPORT
A 60-year-old female patient was admitted to the emergency service and presented with abdominal pain. Symptoms such as total constipation, nausea and vomiting were present for 3 days. She had had similar history of these symptoms previously and she had been hospitalized because of those symptoms. At that time, laboratory and imaging studies revealed no pathological finding one year ago. She had history of hypertension. Abdominal examination revealed abdominal distension and a palpable mass in her upper left quadrant. Laboratory studies were normal. Plain abdominal x-ray showed that there are air-fluid levels in small intestines (Figure1). Abdominal CT revealed dilatation of small intestines and internal herniation (Figure2). With these results explorative laparotomy was performed which showed a fixated membranous structure encapsulating all of the intraabdominal organs and not allowing to explore intraabdominal organs. The diagnosis was sclerosing encapsulated peritonitis according to explorative laparotomy. Adhesiotomy was partially applied. Physical examination was normal with spontaneous intestinal motility and normal defecation during the postoperative follow up period. The patient was discharged from the hospital following uneventful course and appeared well in the outpatient visits.
DISCUSSION

Sclerosing encapsulated peritonitis is a rare clinical condition and its etiology is obscure. The underlying conditions of sclerosing encapsulated peritonitis are multifactorial [2]. It is classified into two categories as idiopathic and secondary. Generally there are colicky abdominal pain, nausea, vomiting and sometimes a palpable mass in the midline of the abdomen. Preoperative diagnosis requires a high index of clinical suspicion. Generally diagnosis of sclerosing encapsulated peritonitis is made with laparotomy [3,4]. In the present case; there was a patient with abdominal pain, left upper quadrant mass and obstructive findings which resulted in explorative laparotomy. In the surgical treatment of sclerosing encapsulated peritonitis, adhesiolysis or adhesiotomy is enough, unless a nonvital intestinal segment is present which requires resection [5]. The retrospective evaluation of the same radiologist revealed a sac encapsulating intestines in the postoperative period. The preoperative mass was in fact the sac enveloping the intestines to the side.

CONCLUSION

In conclusion, sclerosing encapsulated peritonitis may cause acute abdominal signs and most cases are diagnosed at laparotomy. The preoperative diagnosis of this entity may be helpful for proper treatment of patients. Clinicians must rigorously pursue a preoperative diagnosis as it may prevent unnecessary laparotomies, since obstructive findings may be relieved with conservative treatment of sclerosing encapsulated peritonitis to decrease the incidence of negative laparotomies. A better awareness of this entity and the imaging techniques may facilitate preoperative diagnosis.

CONFLICT OF INTEREST

NOT GIVEN

AUTHOR’S CONTRIBUTIONS

Mürşit Dincer

Group 1- substantial contributions to conception and design, acquisition of data

Group 2- drafting the article, revising it critically for important intellectual content
REFERENCES


FIGURE LEGENDS

Figure 1: X-ray: Air fluid levels in small intestine

Figure 2: Intestines are enveloped in a sac giving the appearance of volvulus according to CT
FIGURES

Figure 1: X-ray: Air fluid levels in small intestine
Figure 2: Intestines are enveloped in a sac giving the appearance of volvulus according to CT.