INTRODUCTION
The leading causes of small bowel obstruction in developing countries are postoperative adhesions followed by malignancy, tuberculosis, inflammatory bowel disease and hernias.

Sclerosing encapsulating peritonitis is an extremely rare cause of small bowel obstruction, and can be classified as idiopathic or secondary. The secondary form is the commonest one and most frequently is due to chronic ambulatory peritoneal dialysis. Other causes include abdominal tuberculosis, beta blocker practolol intake, ventriculoperitoneal and peritoneovenous shunts, orthotopic liver transplantation and recurrent peritonitis.

We present a case of a young patient having a chronic abdomen for 9 years with occasional features of subacute intestinal obstruction now presenting with exacerbation of symptoms for few days, due to acute intestinal obstruction, with progressive asymmetrical abdominal distension involving the left infra-umbilical region.

CASE REPORT
A 24 years old lady presented to the emergency department with 3 days history of progressively increasing abdominal pain, vomiting, constipation and progressive distoration of the abdomen due to left sided lower abdominal distention.

On inquiry, it was found that she had a long history of colicky abdominal pain starting around her adolescence. The pain usually occurred in episodes lasting a few days and then subsiding spontaneously or with simple antispasmodic medications, recurring after weeks or even a few months. There was also history of constipation dating back at least 5 years, with bowel movement on alternate days associated with prolonged straining. There was no history of weight loss or bleeding per rectum. She had often reported with these symptoms to family physicians, however, these symptoms had never been very severe and so she never had any investigations carried out.

She developed colicky abdominal pain 3 days ago which started around the umbilicus but then progressively increased in intensity and subsequently had spread to involve most of the abdomen. She had not passed stool for the last 3 days and flatus for the last 1 day. She also had 4 episodes of vomiting in the last 24 hours. She said that her abdomen is protruding on the left side.

On examination, she was a thin young lady who was moderately dehydrated. Her pulse was 90 beats per minute. The blood pressure was 100/70 mmHg and she was afrebrile. There was no evidence of pallor or jaundice. Her abdomen was asymmetrically distended with a prominent bulge in the left infraumbilical area. There was mild generalized tenderness but no guarding or rigidity could be elicited. The bowel sounds were very sluggish.

Plain abdominal X-rays showed distended small bowel loops with multiple air-fluid levels. Full blood count, renal functions and electrolytes were within normal limits. Based on these findings, a diagnosis of acute intestinal obstruction probably due to sigmoid volvulus (due to the left sided bulge) was made and exploratory laparotomy was planned.

The entire small intestine was found to be cocooned and enclosed in a yellowish white thick fibrotic membrane

ABSTRACT
A 24 years old lady presented with classical history of acute intestinal obstruction. There was a background history of chronic abdomen for 9 years. There was asymmetrical abdominal distension. On laparotomy, the entire small intestine was cocooned and enclosed in a yellowish white thick fibrotic membrane resulting in obstruction of the small intestine. When the membrane was carefully peeled off the small intestine, the underlying small gut was found to be absolutely healthy. The histopathology report was consistent with non-specific dense fibrosis. Based on these findings, a diagnosis of abdominal cocoon or sclerosing encapsulating peritonitis was made which is an extremely rare cause of small bowel obstruction.

Key words:  Laparotomy. Fibrosis. Histopathology. Small intestine. Sclerosing encapsulating peritonitis.
(Figure 1). The anterior part of this was calcified and appeared as a shield of the gut. The loops of small gut were adherent to themselves within the single large circumscribed mass resulting in obstruction of the mid small gut while the ileum was collapsed. There were no signs of active inflammation within the peritoneal cavity, neither were there any findings suggestive of tuberculosis. There was no evidence of mesenteric lymphadenopathy. This “mass” was not adherent to the abdominal wall or large gut. The retroperitoneum appeared normal too. The membrane was intimately adherent to the visceral peritoneum of small bowel. When this membrane was peeled off the small intestine, the underlying small gut was found to be absolutely healthy without any stricturing. The membrane was sent for histopathology and abdomen was closed.

Her postoperative recovery was smooth and uneventful. She was started orally on the 2nd postoperative day and was discharged on the 4th. The skin sutures were removed on the 10th postoperative day. The histopathology report was consistent with non-specific dense fibrosis. Based on these findings, a diagnosis of abdominal cocoon or sclerosing encapsulating peritonitis was made.

The patient was placed on Prednisolone 10 mg thrice a day, and was asymptomatic 6 weeks after the surgery.

**DISCUSSION**

The idiopathic form (also known as abdominal cocoon) was first described by Foo et al. in 1978. It mainly affects young females from tropical and subtropical regions, but adult case reports from temperate zones can be encountered in literature. It is characterized by a thick, fibrotic, cocoon-like membrane, partially or totally encasing the small bowel.

Clinically, it presents with recurrent episodes of acute or subacute small bowel obstruction, weight loss, nausea and anorexia, and at times with a palpable abdominal mass.

Most cases are diagnosed incidentally at laparotomy, as in the case presented, although a pre-operative diagnosis is purported feasible by a combination of barium follow-through (concertina pattern or cauliflower sign and delayed transit of contrast medium) and computed tomography of the abdomen (small bowel loops congregated to the centre of the abdomen encased by a soft-tissue density mantle). However, pre-operative diagnosis requires a high index of clinical suspicion.

Surgery (membrane dissection and extensive adhesiolysis) is the treatment of choice, and there is usually no need for bowel loop resection, especially when a pre-operative diagnosis is feasible. Resection of the bowel is unnecessary and it increases morbidity and mortality. Resection is indicated only if the bowel is non-viable. An excellent long-term postoperative prognosis is most of the times guaranteed. Recently, in a series of 5 patients, in addition to adhesiolysis, small bowel intubation was performed with good results. There is no evidence-based therapy for the condition. Current suggestions include anti-inflammatory and immunosuppressive therapy. Therapy with corticosteroids is effective and should be considered as the first line therapy. Tamoxifen, a non-steroidal anti-oestrogen agent, has been successfully used in the treatment of fibrosclerotic disorders.

**REFERENCES**


Abdominal cocoon


