

## Case Report

### STRANGULATION OF SMALL BOWEL INTO THE LESSER PERITONEAL SAC A Case Report

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#### Abstract

The absence of vomiting in high acute intestinal obstruction due to strangulation of the bowel into the lesser sac may be as a result of local pressure on the stomach and gastric ileus. A cut off appearance of the jejunum at the site of the foramen of Winslow on plain X-ray abdomen, when present, is an additional sign in the diagnosis of intestinal obstruction due to small bowel herniation into the lesser sac.

#### Introduction

The Herniation and Strangulation of jejunum into the lesser peritoneal sac is an uncommon cause of acute intestinal obstruction. A high intestinal obstruction is invariably associated with an early onset of vomiting and dehydration. The vomiting was absent in the present case. A plain X-ray of the abdomen gives valuable clue to the diagnosis of an internal sac hernia. The clinical presentation and x-ray appearance of the current case are discussed.

#### Case Report

Mrs. M.M., a 78 years old widow, was admitted to the Crumpsall Hospital, Manchester on 26-6-1973 as an acute abdomen. She had developed constant central abdominal pain without radiation for the previous three days. She complained of anorexia, constipation and nausea but no vomiting. Her past history was essentially negative although she has had an appendicectomy done many years ago. On examination, she was a weak thinly built old lady who weighed 50 Kgms. Her blood pressure was 130/100 mm of Hg and pulse 120 per minute and regular. The abdomen was slightly distended, tender and silent. Her W.C. was 13,000, Hb 13.8 G%, P.V.C. 40%. Blood urea 51 mgm%. Her electrolytes, serum amylase and liver function tests were within normal limits. X-ray chest showed some patchy inflammatory changes in the left costophrenic angle, and healed calcified tuberculous foci in the right upper zone. Left decubitus and supine X-ray of the abdomen showed distended loops of jejunum with multiple fluid levels. The proximal part of the colon and caecum were also distended. The stomach was distended and a soft

tissue mass was impressing the lesser curve displacing it to the left. A few gas bubbles and fluid levels were present in the mass. The distended jejunal loop on the left side of the abdomen showed a cut off appearance at the upper end at the site of the foramen of Winslow (Fig).



Fig. Plain X-ray abdomen, illustrating signs of lesser sac hernia.

A pre-operative diagnosis of a hernia into the lesser peritoneal sac causing intestinal obstruction was made. At laparotomy, she had some blood stained peritoneal fluid, and gangrenous strangulated jejunal loops about 2 feet long in the lesser peritoneal sac. Resection of the gangrenous jejunum followed by end to end anastomosis was carried out but the patient succumbed post operatively.

#### Discussion

Hernia into the lesser peritoneal sac is more frequent in men (Aird 1957). The small bowel is predominantly involved as a single or double loop, though caecum (Henisz et al., 1974), gall bladder (Dardik and Cowen, 1967) and colon (Mellins 1973) have also been recorded. The patient with acute intestinal obstruction due to a small

bowel strangulation, usually presents with vomiting as an early symptom, but in the present case there was total absence of vomiting. It is suggested that the absence of vomiting was due to: (a) compression (b) ileus of the stomach as a result of strangulated small bowel in the lesser sac.

Upper gastrointestinal Ba studies are helpful in confirming the diagnosis. A plain x-ray abdomen usually shows the stomach, displaced to the left and anteriorly and a soft tissue mass medial to the lesser curve of the stomach containing air shadows and multiple fluid levels (Mellins 1973). A cut off appearance of the small bowel when present, at the site of the foramen of Winslow, is an important additional clue in the x-ray diagnosis of intestinal obstruction as a result of herniation of the small bowel into the lesser sac. These signs are well illustrated in the present case (Fig. 1, 2). This appearance has not been mentioned before.

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