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Case Report
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Intraoperative Surprise in a Case of Small Bowel Obstruction: Sigmoid Mesocolic Hernia - Intersigmoid Hernia: Case Report

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Abstract

Introduction: The intersigmoid hernia is part of a rare group of three internal hernias known as sigmoid mesocolon hernias. Clinically they present with small bowel obstruction and are rarely diagnosed preoperatively. However, absence of previous surgery with no external hernia should raise suspicions of the diagnosis.

Clinical Presentation: We are presenting a case of a 70 year-old female presented to emergency department with abdominal pain, vomiting and absolute constipation and features of strangulating abdomen. She was explored and revealed a strangulated sigmoid mesocolon hernia. Patient underwent resection anastomosis and has good post-op recovery.

Discussion: Sigmoid mesoscopic hernias are rare group of hernias and they contribute to less than 4% of the internal hernias and a rare cause for intestinal obstruction. Early diagnosis by CT may be ideal before intervention either laparoscopically or open method.

Conclusion: These cases reported rarely and early diagnosis and awareness of this entity plays a big role in the outcome.

Keywords: Mesocolic hernia; Intersigmoid hernia; Intestinal obstruction

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Introduction

The intersigmoid hernia is part of a rare group of internal hernias known as sigmoid mesocolon hernias. Clinically they present with small bowel obstruction and are rarely diagnosed preoperatively [1]. The intestinal obstruction in a virgin abdomen may be a clue for diagnosis [2].

Computerized tomography may be helpful by certain pointing findings or by specific findings for intersigmoid hernia like U- or C-shaped cluster of small bowel posterolateral to the sigmoid colon. Early imaging and surgical intervention will improve the survival [3].

Intersigmoid hernia is rarely reported. This is a case of intersigmoid hernia in a 70 year old person presenting with acute small bowel obstruction. This condition is rarely diagnosed preoperatively even though CT may show signs to suggest internal hernia.

Case Presentation

A 70 year-old female presented to surgical casualty with abdominal pain, vomiting and obstipation. There was no significant history except for past CAD and on Ecosprin.

General examination was unremarkable. Abdominal examination revealed a tense distended abdomen with marked tenderness in the left iliac fossa. There was an increased bowel sound and Clinical diagnosis of small bowel obstruction was entertained.

Conservative management was initiated with IV fluids and Nasogastric decompression. All blood investigations were normal and no abnormality was detected on X-ray chest. Plain X-ray abdomen had features of small bowel obstruction. After failed Conservative management patient underwent a midline laparotomy. It was found that a loop of small bowel was found to be with doubtful viability within the intersigmoid fossa.

Figure 1: Loop entering into the intersigmoid fossa. Figure 2: Inter sigmoid defect on mesentery. Figure 3: Resection Anastomosis Bowel. The gangrenous small bowel was resected, an end-to-end

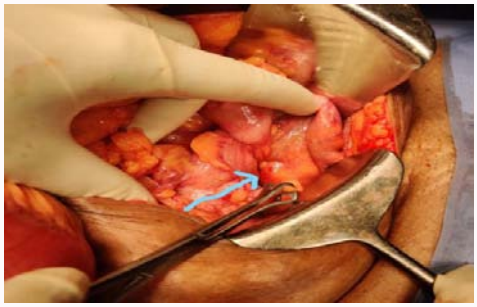

Figure 1: Small bowel loop incorporated into the mesocolic defect and intersigmoid fossa strangulating.

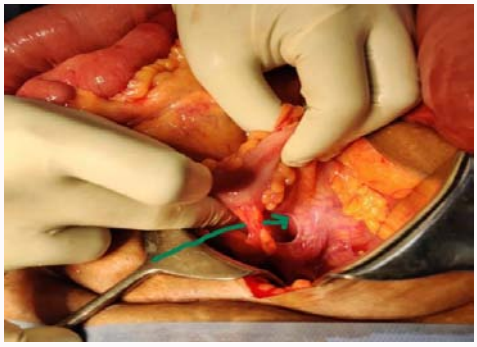

Figure 2: Defect in the sigmoid mesocolon and intersigmoid recess.

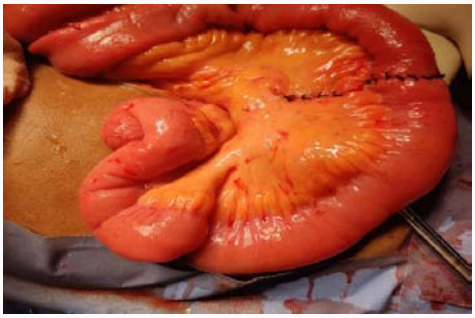

Figure 3: Resection anastomosis in 2 layers.

anastomosis was done and defect was closed. The patient had normal post operative course.

Discussion

Internal hernias are aheniation through pathological opening within the limits of peritoneal cavity like paraduodenal, pericecal, through foramen of Winslow, mesocolon and retroanastomotic hernias. Sigmoid Mesocolic hernias constitute 6% of internal hernias and include intersigmoid, transmesosigmoid and intramesosigmoid hernias as described by Benson and Killen [4].

The most common type is herniation into a congenital fossa, situated in the attachment of the posterolateral aspect of the sigmoid mesocolon is called intersigmoid hernia. Internal hernias are rare cause of intestinal obstruction occurring in less than 4% of cases and incidence of obstruction due to inter sigmoid hernias are about 1 in 800 indicating the rarity of the problem [5].

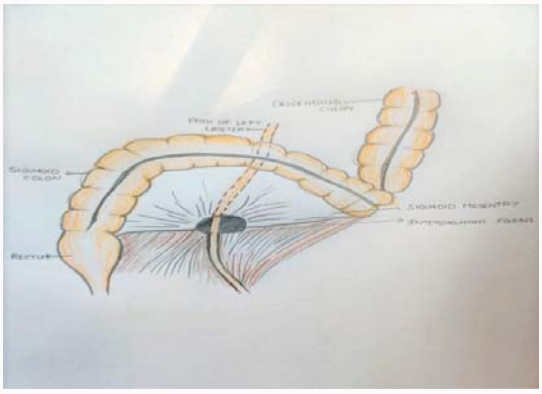

Figure 4: Intersigmoid recess on diagrammatic representation.

The Herniation occurs through the intersigmoid fossa or recess located at the level of iliac crest where descending colon continues as a sigmoid and acquires a mesentery. The left ureter courses the base of the sigmoid mesocolon through the intersigmoid fossa. Herniation of intestines through this fossa manifests as intersigmoid hernia (Figure 4).

This case presented with acute intestinal obstruction and due to the features of strangulating abdomen was explored without a CT scan. CT scan help in diagnosis by certain pointing features or identification of a U- or C-shaped cluster of small bowel posterolateral to the sigmoid colon [6]. Timely imaging and intervention will reduce the mortality by 50%.

Conclusion

Intersigmoid hernias are rare internal hernias and will present as acute intestinal obstruction. The preoperative diagnosis may be contemplated if the patients have non-strangulating features or explored immediately to minimize strangulation and thus morbidity and mortality. Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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