



# A Rare Case of Small Bowel Obstruction Secondary to Paracecal Hernia

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## Abstract

Internal hernias are a very rare cause of intestinal obstruction. Internal hernias have a high possibility of going through ischemic changes of the involved bowel loops and can become life threatening and a surgical emergency, hence proper understanding for prompt diagnosis and management is needed. We hereby present to you a case of 65 year old lady with complaints of Abdominal pain for the past 10 days with history of vomiting and constipation. She was diagnosed with paracecal hernia causing obstruction and was managed with laparoscopic surgery. The diagnosis, management and discussion of a case of Paracecal hernia are as follows.

## Introduction

Internal hernias are defined as, Protrusion of viscus through an intra-abdominal aperture without traversing fascial planes [1]. The overall incidence of internal hernia is less than 1% of which 0.6 to 5.8% cause small bowel obstruction. Internal hernias can be acquired or congenital. Paracecal hernias account for 13% of all internal hernia and is the second most common type [2,3]. Herniation of small bowel into the defect causes a closed loop obstruction, without proper knowledge of the condition they can be misdiagnosed and an delay in the intervention can cause ischemic changes thus increasing the mortality of the patient [4].

## Case Presentation

A 65 year old lady was referred from a peripheral hospital with complaints of abdominal pain, colicky intermittent type of pain, non-radiating for the past 10 days. Symptoms aggravated on taking food. Pain was associated with vomiting 4-5 episodes per day containing partially digested food particles for the past 10 days. Patient had complaints of Constipation, Passing hard stools once in three days. There was no history of similar episodes in the past. Patient has been a known case of SHTN for the past 3 years

and is on regular medication. Patient has a history of laparoscopic sterilisation.

On examination Pulse rate was 87bpm, Blood pressure was 120/70mmhg, Abdominal distension was present with tenderness seen in the Epigastric, Periumbilical region and right iliac fossa. There was no guarding or rigidity. Digital rectal examination showed rectum with hard stools. Blood investigation was at normal range. CT showed dilated small bowel loops with multiple air fluid levels with transition point at the mid ileum. The patient passed stools on the day of admission and was tolerating semisolid diet hence she was managed conservatively. Colonoscopy was negotiated up to the sigmoid colon beyond which the patient had severe abdominal distension hence procedure was deferred. Patient had continuous Vomiting and abdominal pain with distension (Figure 1).

Keeping in mind the inconclusive diagnosis the patient was taken up for a diagnostic laparoscopy. Intraoperatively the proximal ileum was seen herniating through a defect in the paracecal space with adhesive bands. The herniated bowel loop was reduced followed by adhesiolysis and the hernia defect was widened (Figures 2-6).

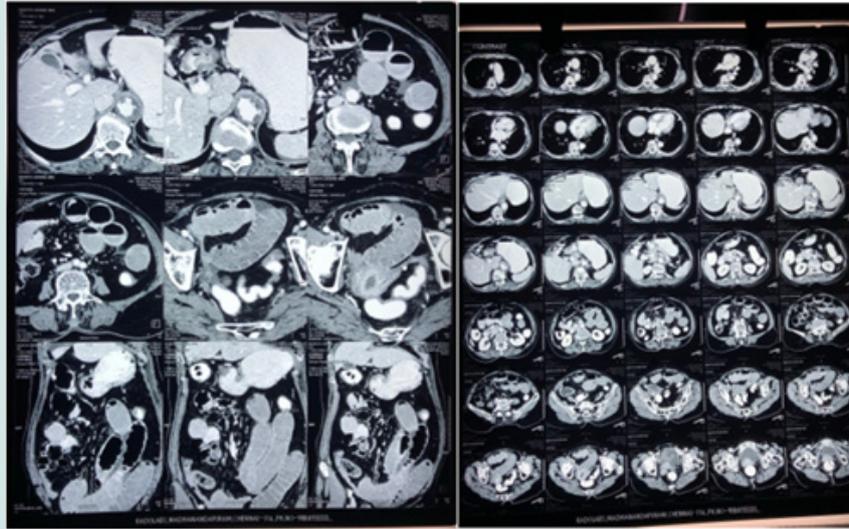


Figure 1: CT showed dilated small bowel loops with multiple air fluid levels with transition point at the mid ileum.

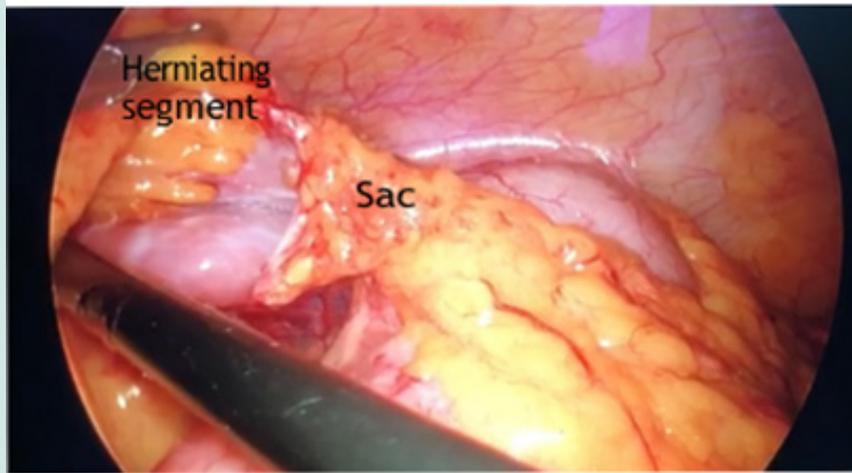


Figure 2: Proximal ileum seen herniating through a defect in the paracecal peritoneal fold forming a closed loop.



Figure 3: Adhesive bands.

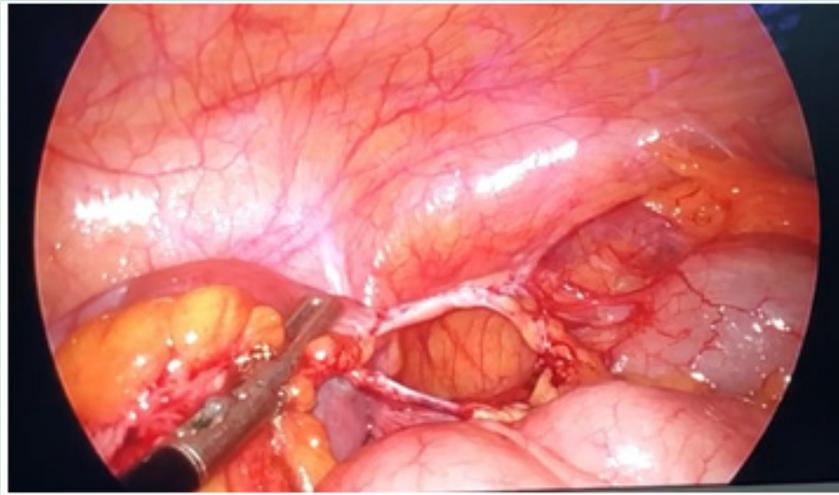


Figure 4: Partial reduction of the herniating bowel segment.

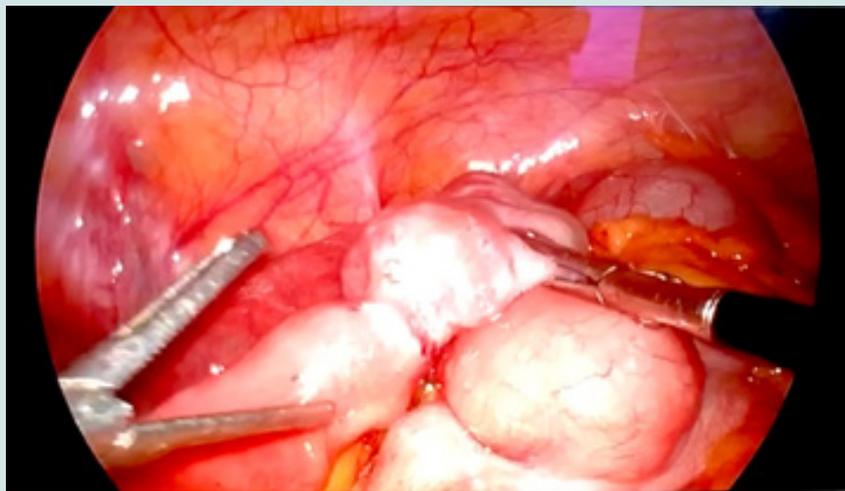


Figure 5: Herniated Bowel segment after reduction from the defect.

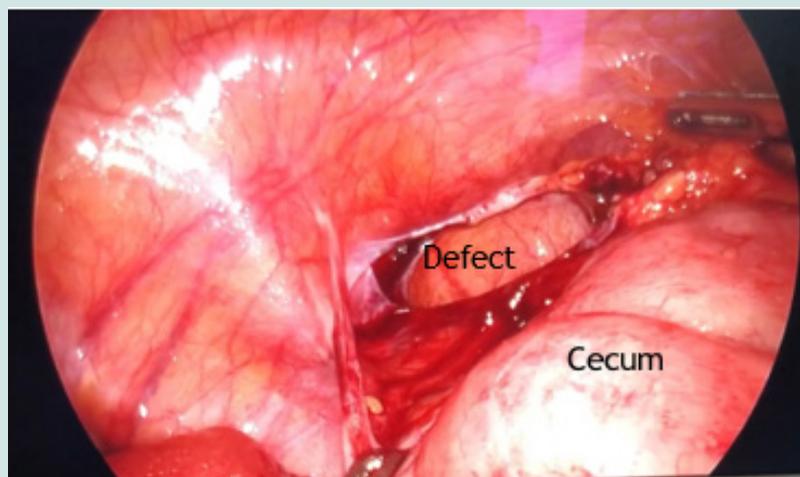


Figure 6: Peritoneal defect.

## Discussion

An internal hernia is a protrusion of a viscus, most commonly involving the small bowel, through a normal or abnormal peritoneal or mesenteric defect within the abdominal and pelvic cavity [5]. The incidence of internal hernia is less than 1% of which 0.6 to 5.8% presents as small bowel obstruction [6]. Internal hernias can be acquired or congenital. Congenital types like Para duodenal, peri caecal, foremen of Winslow, transmesenteric, supravesical and intersigmoid usually is due to abnormalities in the process of intestinal rotation during embryonic development [7]. An acquired hernia requires formation of intra abdominal aperture through which bowel can herniate, its usually post surgical like RYGB, trauma, Increased intra abdominal pressure due to obesity, coughing or straining, Rapid weight loss, immunosuppression.

Our case the herniation of the proximal ileum is seen in the Paracaecal sulci without going for ischemic compromise. Paracecal hernia is the second most common type of congenital internal hernia. Usually bowel is seen herniating through the paracaecal sulci formed by peritoneal folds. Internal hernias are classified as Lateral, Internal and Retrocaecal type. Our case belong to the lateral type as it arises in between the Caecum and the lateral pelvic wall. Paracecal hernia's can also be classified based on the site of herniation like Paracaecal sulci, Caecal fossa, caecal recess like superior ileocaecal recess, inferior ileocecal recess and retrocaecal recess.

Case of internal hernia typically present with symptoms of small bowel obstruction like vomiting, vague abdominal pain and distension after a meal with constipation or obstipation [8]. It is often difficult to come to a preoperative conclusion, the diagnosis is often made intraoperatively. Computed tomography is the choice of investigation which can help in your diagnosis and can also define the type of internal hernia, but it is always subjective and is usually missed radiologically [9]. Direction of the caecal shift may give an indication of the type of paracaecal hernia, for example it will be shifted anteriorly in a retrocaecal type. Late intervention can always lead to strangulation of the affected bowel thus increasing the mortality of the patient [10]. With advances in the field of

minimal access surgery, a diagnostic laparoscopy can be performed to come to a conclusion for further line of management. In our case the Paracaecal hernia was identified laparoscopically and reduced by the same without any complication.

## Conclusion

Paracaecal hernia must be kept in mind as a DD in Small bowel obstruction and should not be missed. With the help of Radiological investigations we can come to a prompt diagnosis and avoid the bowel going into ischemic changes. Laparoscopic intervention is an excellent choice for uncomplicated Internal hernia, with less complication to the patient.

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