

Supravesical Hernia as a rare cause of intestinal obstruction

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Case Report

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Abstract: Supravesical hernia is rare and often diagnosed intra-operatively. This type of hernia occurs in supravesical fossa and diagnosis can be made pre-operatively with the help of computer tomography (CT) scan. We are reporting a rare case of supravesical hernia presenting with intestinal obstruction.

Keywords: Supravesical hernia, Intestinal obstruction, internal hernia

INTRODUCTION

Supravesical hernia is an unusual presentation and it is difficult to diagnose without imaging prior to intervention. This type of hernia occurs in supravesical fossa and often complicated with intestinal obstruction. We report a rare case of supravesical hernia complicated with intestinal obstruction which was diagnosed intra-operatively.

CASE REPORT

A 68 years old male with no medical comorbidities presented with abdominal distension associated with colicky abdominal pain and vomiting for two days. Hemodynamically he was stable with only mild dehydration. On clinical examination, his abdomen was distended with no signs of peritonism. Digital rectal examination was normal. His abdominal X-ray revealed small bowel dilatation (Figure 1) and his blood investigations were normal. In view of no previous history of abdominal surgery and X-ray abdomen showing small bowel dilatation, proceeded with CT abdomen (Figure 2). He underwent emergency diagnostic laparoscopy after adequate resuscitation. Intra-operatively, there was loop of small bowel in the supravesical fossa causing the intestinal obstruction. Herniated small bowel released from the sac via laparoscopic and the defect around 2 x 3cm was closed with non absorbable suture. The herniated small bowel appeared healthy after the reduction hence no resection was done. Post operative period was unremarkable and patient was discharged home after five days.



Fig-1: X-ray of Abdomen showing - Small bowel dilatation

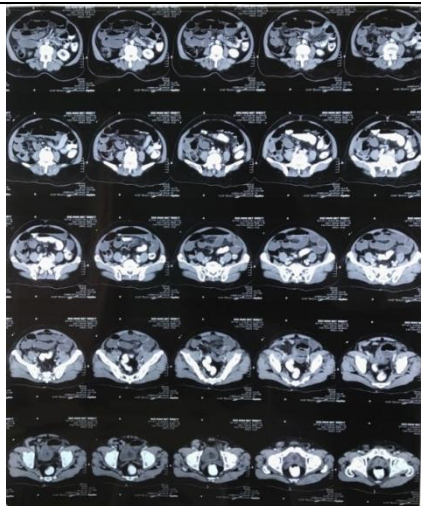


Figure 2: CT Abdomen showing small bowel close loop obstruction.

DISCUSSION

Supravesical hernia develops between median umbilical ligament (remnant of urachus) and medial umbilical ligaments (left or right umbilical artery) [1]. This type of hernia is further subdivided into internal and external supravesical hernia. External supravesical hernia happens due to weakness of the vesical preperitoneal tissue and the internal occurs due to growing hernia sac from back to front and above the bladder in a sagittal paramedian direction [1, 2]. It's a rare presentation and requires imaging modalities prior to intervention to confirm the diagnosis.

Pre operative diagnosis will be challenging as it is always complicated with intestinal obstruction in patients with no previous abdominal surgery. In our case, the diagnosis was made during the diagnostic laparoscopic surgery. Pre- operative imaging and investigations play important role in detecting the supravesical hernia. Computer tomography scan (CT scan) and magnetic resonance imaging (MRI) are useful modalities in diagnosing the supravesical hernia prior to operation if the patient is stable hemodynamically [3]. Cystoscopy may also be used to diagnose internal supravesical hernia in preoperatively [4].

The treatment of choice depends on the patient condition and surgeon's experience. Treatment will be either exploratory laparotomy or diagnostic laparoscopic to reduce the bowel from the hernia sac followed by closure of the defect. If the herniated bowel is gangrenous hence bowel resection and primary anastomosis is essential.

CONCLUSION

Supravesical hernia is an uncommon presentation but can be complicated with intestinal obstruction. Diagnosis of intestinal obstruction secondary to supravesical hernia is difficult to establish prior to surgery. Imaging such as CT or MRI will be beneficial in pre-operative diagnosis of the supravesical

hernia. Laparoscopy can be used as a tool in the diagnosis and therapeutic for this type of rare hernia.

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