ORIGINAL RESEARCH PAPER
Volume - 11 | Issue - 08 | August - 2022 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

"PRIMARY INTERNAL HERNIA IN ADULT: A RARE CASE OF ACUTE ABDOMEN".

Surgery

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ABSTRACT

Internal hernia is a protrusion of the viscus or part of the viscus through a peritoneal or mesenteric aperture. It can be due to birth defects, trauma, surgical intervention, inflammatory conditions, and raised intra-abdominal pressure. The most common internal hernia is paraduodenal hernia, followed by paracecal hernia. In paediatric age groups, internal hernias are found to be more prevalent as compared to adults. Hence, primary internal hernia is the rarest finding in adults. Clinical diagnosis is next to impossible as it may present either with an acute abdomen or with clinical signs of intestinal obstruction. Computed tomography guides us towards making the diagnosis.Here, we present a case of a 20-year old lady with an acute abdomen and who was getting treatment in the line of renal calculi. Computed tomography helped in the planning of surgery. Intraoperatively clumped ileal loops in the right iliac fossa enclosed within a hernial sac lying around the caecum are found, and further exploration reveals that the patient does not have an omentum.

KEYWORDS

Acute abdomen Hernia; Intestinal obstruction; Paracecal

INTRODUCTION –

Internal hernias are extremely rare. [1, 2]Incidence has been reported in autopsy cases to be 0.2-0.9%. [2, 3]. It is classified under congenital and acquired, where congenital includes intraperitoneal and retroperitoneal. [3, 4]Internal hernia remains asymptomatic mainly, but it can present with bowel obstruction, perforation and an acute abdomen [4,5]. Because of its nonspecific symptoms, pre-operative diagnosis remains a challenge, so computed tomography is the main imaging modality of its diagnosis. [2, 6] After obtaining clearance from the departmental ethical committee and with the informed consent of the patient we present a case of a 20-year-old lady with an acute abdomen who was diagnosed with congenital internal hernia.

Case report –

A 20-year-old married nulliparous woman presented to a casualty department with the chief complaint of abdominal pain and vomiting for two days. The pain was colicky, radiating from the right side of the flank to the hypogastrium, and later it was distributed diffusely all over the abdomen. It was associated with vomiting of 3–4 episodes that were non-projectile, non-bilious, not blood stained, and the contents were undigested food particles. History of loss of appetite was present. No history of trauma or surgical intervention. No history of any co-morbidity. A similar episode of pain was present 4 months back and the patient was treated on the basis of right renal calculus as per the ultrasonography report. The patient was passing flatus normally but had a history of constipation. On examination, the lower part of the abdomen was distended (Figure 1a) and tenderness was present in the right iliac fossa, hypogastrium, and left iliac fossa. Bowel sound was present but sluggish. DRE—finger stained with faeces.

On evaluation-

hemoglobin- 9.9gm/dl, a total count of 13,700 cells/cumm, and a neutrophil count of 84%. An X-ray abdomen Erect reveals gaseous distension of the bowel loops. Ultrasonography reveals bowel loop dilatation, mild hydroureteronephrosis, and mild ascites. Patient was managed conservatively with nil per oral for 48 hours, maintenance of hydration, per rectal enema and with symptomatic treatment. The patient was pain free after 48 hours. After allowance of liquid diet the patient again developed similar episode of pain, which was controlled by the opioid group of analgesics. Contrast enhanced computed tomography of the abdomen (Figure-B) revealed dilatation of the ileal loops in the right lower quadrant of the abdomen. The dilated ileal loops were clumped. The maximum calibre of the dilated loops was approximately 3.5 cm. Mottled attenuation was noted in the dilated ileal loops. Mild mesenteric fat stranding was noted. The jejunal loops appeared prominent with a maximum calibre of 2.6 cm, mild ascites, and mild right-sided hydroureteronephrosis due to compression of the right mid ureter by the dilated small bowel loops.

Exploratory laparotomy done and intraoperatively (Figure A) it was seen that the patient had a right paracecal hernia. Ileal loops were clumped together inside a sac (Figure 2a). Adhesiolysis was done (Figure 2b). The bowel loops were made free from the sac. Bowel loops were viable (Figure 2c), but there was no omentum (Figure 2d).Milking of the bowel loops was done. Post operatively (Fig 1b), the patient was kept with Ryle's tube, nil per orally for 5 days, broad spectrum antibiotics, analgesics, and maintenance of hydration. Gradually, the abdominal distension was reduced and the patient started to pass flatus. The patient is under follow up. In a follow-up period of one month, the patient is doing well, the wound is healthy and patient is normally passing stool without any complaints.

Conclusion —

As primary internal hernia is extremely rare in adults, it should always be kept as a differential diagnosis in cases of acute abdomen to prevent misdiagnosis and mismanagement. Pre-operative CECT abdomen aids in the diagnosis and helps in the planning of the surgical procedure. Timely surgical intervention reduces the rate of mortality and morbidity.

Footnotes-

Conflict of interest- No conflict of interest.

Funding – None

Acknowledgement- I am thankful to the Department of Radiology, MIMS Barabanki

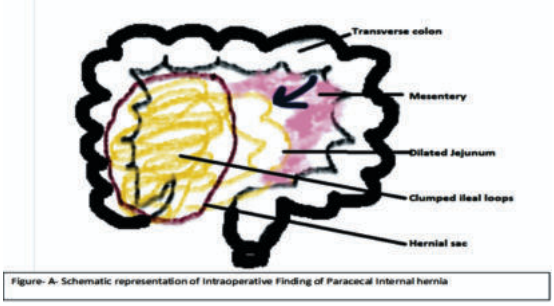
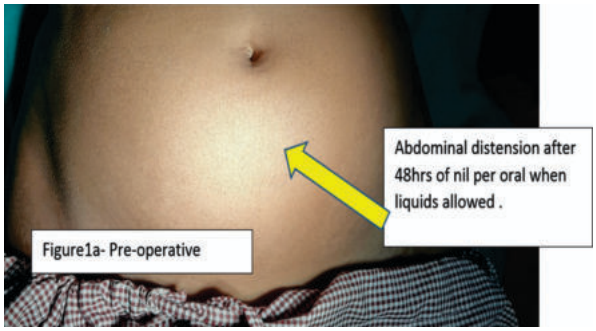
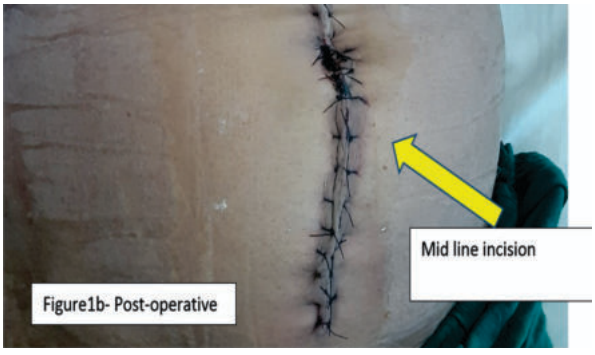


Figure- A- Schematic representation of Intraoperative Finding of Paracecal Internal hernia

PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr





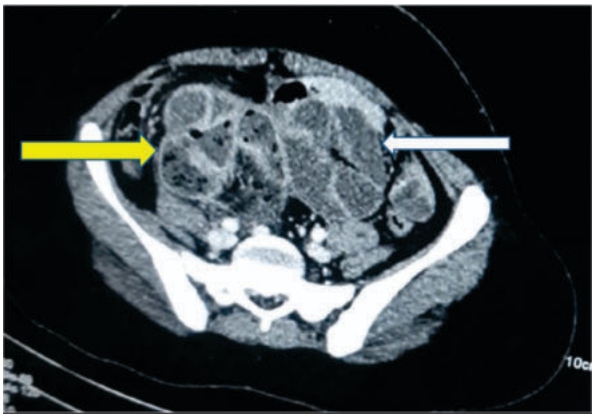
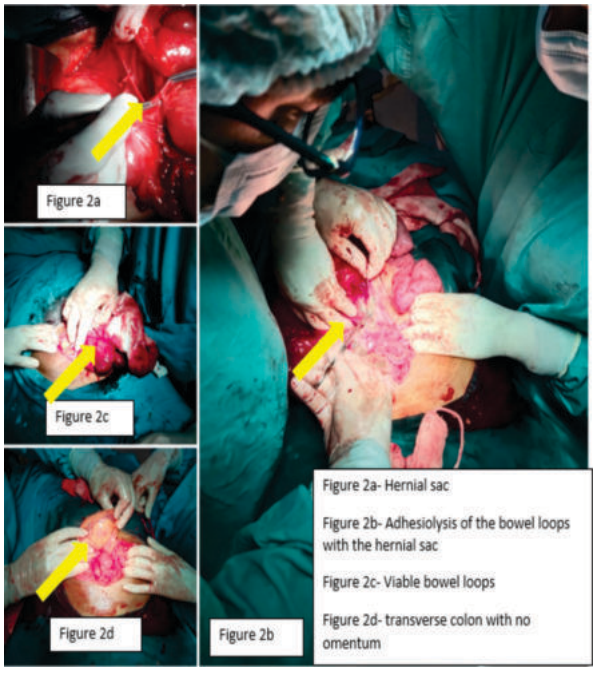


Figure B- Computed Tomography Of Abdomen, Yellow Arrow Showing Clumping Of Ileal Loops And White Arrows Shows Jejunal Dilatation



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