

Rare Presentation of Intestinal Obstruction

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Abstract

Intestinal obstruction due to a rare cause in an adult with chronic pain abdomen.

Introduction: The description of patients presenting with small bowel obstruction dates back to the third or fourth century BC, when Praxagora created an enterocutaneous fistula to relieve a bowel obstruction [1]. Midgut volvulus due to intestinal malrotation is a rare cause of intestinal obstruction when occurring in adult life [2]. This paper documents the difficulties in reaching an early diagnosis.

Discussion: bowel mal rotation can be a mal fixation, malrotation with volvulus and vascular compromise. Usually present in paediatric age group here we present an adult with intestinal obstruction. Surgeries usually done are release of adhesions, prophylactic appendectomy caecostomy and hemicolectomy

Keywords: Intestinal Malrotation; Gut Volvulus; Bowel Obstruction; Laparotomy.

Case History

20 Year old gentleman with c/o pain in the lower abdomen since 10 days, pain was there since many months on and off h/o distension present since 4 days, h/o watery vomitus since 3 days, non blood tinged, h/o abdominal distension since 5 days.

No h/o burning micturition., no h/o bladder distension.

General and Systemic Examination

NO pallor/no icterus, cyanosis, clubbing, no generalised lymph adenopathy.

Temperature-normal

PR-98/min.bp:100/60 mmhg

Cvs and RS - NAD

P/A -distension +, bowelsounds-absent

Investigations

Hb-8 gm%, TC- 22000, ESR-50 mm/hr, Bl urea-40, S. creatinine-1.8

Complete blood count showed leucocytosis with neutrophilia Patient had hyponatremia and hypokalemia Patients urea and creatinine was normal patient was non reactive to HIV AND HBsAg.

Imaging

Xray Erect Abdomen Showed Multiple Air Fluid Levels and Step Ladder Pattern

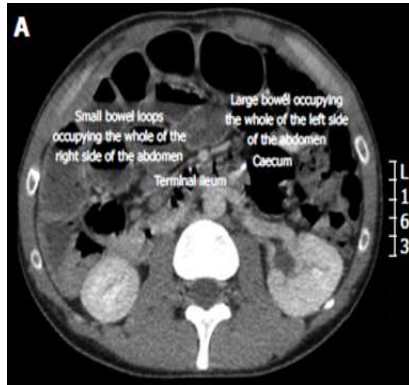


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Usg Abdomen

Multiple air fluid levels suggestive of intestinal obstruction. In cases of malrotation, a contrast enhanced CT scan shows an inversion of the superior mesenteric artery (SMA) and superior mesenteric vein (SMV). In malrotation, the SMV is often situated to the left of the artery or rotates around the artery.



CT scan showing large bowel occupying an abnormal position

CT scan revealed grossly dilated large and small bowel in left pelvic region with gas absence below the sigmoid colon.

Treatment Started

Patient was started on analgesics and antibiotics. Ryles tube aspiration was done which gave out green coloured fluid. The patient had no symptomatic improvement. The patient was decided to be operated and laprotomy was planned with two pints of blood. Laprotomy was done, on table dilated small bowel loops popped out, dilated large bowel seen. *Empty Right Iliac Fossa*. appendix, caecum and ascending colon on left side of abdomen. Flimsy adhesions were present between omentum, mesocolon, ileum and mesentery near iliac junction. prophylactic appendectomy was done. Abdomen was closed in

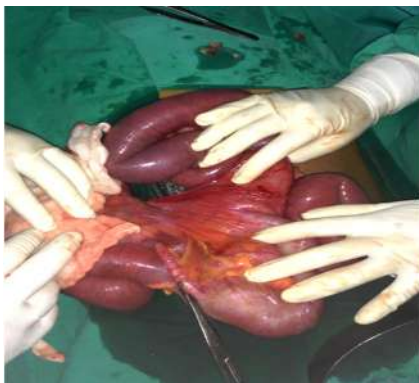


Fig. 1: Showing appendix on the ascending colon, retrieved from the left iliac fossa, with no attachment of ascending colon to posterior abdominal wall



Fig. 2: Showing bare ascending colon and transverse colon held between fingers



Fig. 3: Showing position of ileum joining ascending colon on the right side

layers with a flatus tube in situ. Patient was discharged on the 7th day.

Discussion

- Malrotation of the midgut has usually been estimated to occur in approximately one in 500 newborns and presents within the first month of life in 64–80 patients [3]. However, some patients will present later, even in adulthood, or remain asymptomatic for life. Atypical symptoms such as sudden abdominal pain with (bilious) vomiting over a period of months or years are typical and may eventually lead to further diagnostics [4].
- Intestinal malrotation is defined as any deviation from the normal 270° counterclockwise rotation of the midgut during embryologic development, also known as nonrotation. The failure of the normal physiological rotation of the midgut

leads to various anomalies, the intestines can be situated correctly except for a small vertical attachment of the small bowel mesentery resulting in limited fixation to the retro peritoneum.

- This makes the small bowel highly mobile and therefore prone to midgut volvulus. This anomaly is known as a malfixation. During the operating procedure, the ascending colon, transverse colon, were freely mobile and were placed deep in the left iliac fossa with adhesions between omentum and colon [ascending, transverse and sigmoid colon], adhesions between ileum and mesentery and adhesions between lateral paracolic gutter and colon.
- Ladd's procedure is usually prescribed for this condition. In case of a malfixation and a normally located small bowel, no means are identified to surgically prevent midgut volvulus. There is a high risk of these patients developing complications in the future [5]. Some authors state that the use of Ladd's procedure or division of Ladd's bands and adhesiolysis relieves symptoms and due to the formation of intra-abdominal adhesions after the procedure, prevents recurrence in the majority of patients [6,7].

Conclusion

In cases of intestinal obstruction, volvulus when diagnosed. Detorsion followed by appendicectomy is the simplest procedure, also advocated is caecostomy,

when other associated anomalies are present appropriate procedures like hemi colectomy with ileocolostomy should be done [8].

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