

Case Report

A rare case of small bowel volvulus leading to bowel gangrene.

¹ Dr.Samiksha Naik* , ² Dr.Jude Rodrigues

¹Senior resident in department of General surgery,Goa Medical College

² Professor and Head in Department of General surgery ,Goa Medical College

Corresponding author*



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License

Source of support: Nil

Conflict of interest: Nil

Abstract:

Small bowel volvulus refers to the abnormal twisting of a loop of small bowel around the axis of its own mesentery².It represents less the 5% of all intestinal obstruction.¹ It is a rare and life threatening surgical emergency². Nearly 75 % of volvulus occur in colon and 25% occurs in small bowel³. Small bowel volvulus is more common in neonates and young adults.

Key words: Volvulus, jejunocolic anastomosis

Introduction:

Small bowel volvulus is a rare cause of intestinal obstruction. Primary small bowel volvulus occurs without any predisposing cause. Occurs due to abnormal twisting of a loop of small bowel around the axis of its own mesentery².It can be primary or secondary. In primary there is not a definitive cause whereas secondary is due to presence of some predisposing factor.

Case Report:

A 31 years old male presented with history of abdominal pain and since 1 day, There is history of prior appendectomy done 5 years back. On examination patient was Conscious , oriented, pulse:100/min, bp 100/60 mm Hg, Per abdomen generalised guarding present ,bowel sounds sluggish. Investigations : Blood routine...TC:10600 ,renal function test, Chest xray was grossly normal, Xray abdomen was suggestive of dilated small bowel loops. usg abdomen was suggestive of free fluid in between bowel loops. CT scan showed presence of whirl pool sign (a tightly twisted mesentery around the point of torsion) . Treatment : emergency laparotomy was done for the patient with resection of gangrenous small bowel with right limited hemicolectomy with jejenocolic anastomosis. Histopathology of the bowel was suggestive of bowel gangrene

Discussion

Small bowel volvulus is a rare but life-threatening surgical emergency⁴. This twisting may produce a mechanical obstruction, vascular compromise, or both leading to twisting and occlusion of mesenteric vessels causing intestinal obstruction, venous engorgement, gangrene and perforation.

It can be classified as primary and secondary subtypes. In primary variety, there is no known cause whereas secondary variety occurs due to the presence of predisposing lesions, either congenital or acquired of which postoperative adhesion is the most common responsible factor. Primary small bowel volvulus is the abnormal bowel peristalsis generated due to the sudden overfilling of the empty bowel loop with a large portion of meal after prolong fasting.⁵ Secondary small bowel volvulus is commonly seen in the elderly population with mixed gender distribution. There are no specific clinical features or laboratory findings and a high index of suspicion is required to reach a diagnosis.

Conclusion:

Small bowel volvulus is a rare entity. Due to rarity of occurrence and high morbidity clinician should take into consideration of this as an suspicion for acute pain in abdomen.

Bibliography:

- 1.Brinda MA, Manjunath S, Balasubramanya KS, Nanjaiah B. An unusual case of small bowel volvulus. *Journal of Clinical and Diagnostic Research: JCDR*. 2015 Nov;9(11):PD08.
- 2.Mahdavi A, Yunesi N. Small bowel volvulus in a primigravida woman: Case report. *Journal of Family and Reproductive Health*. 2007;1(1):51–54.
- 3.Vijayaraghavan SB, Ravikumar VR, Srimathy G. Whirlpool Sign in Small-Bowel Volvulus Due to a Mesenteric Cyst. *J Ultrasound Med*. 2004;23:1375–77
4. Iwuagwu O, Deans GT. Small bowel volvulus: a review. *Journal of the Royal College of Surgeons of Edinburgh*. 1999 Jun 1;44(3):150-5.
5. L. N. Tsang, C. T. Joseph, M. S. B. De Robles, S. Putnis, “Primary Small Bowel Volvulus: An Unusual Cause of Small Bowel Obstruction”, *Cureus*, vol.11 (12), pp. 6465, 2019.