



LAPAROSCOPIC LADD'S PROCEDURE IN A 58YR FEMALE WITH TRANSVERSE COLON TUBERCULOSIS MASS WITH MALROTATION - A RARE CASE REPORT

General Surgery

Dr. Soham J Shah Department of General Surgery, JNMC, KLES Dr Prabhakar Kore Hospital & MRC, Belagavi, India.

Dr. Abhijit S Gogate Department of General Surgery, JNMC, KLES Dr Prabhakar Kore Hospital & MRC, Belagavi, India.

ABSTRACT

Intestinal malrotation is partial or complete failure of 270% counterclockwise rotation of midgut around the superior mesenteric vessels in embryonic life. Malrotation can present in any age group. Most of the patients present within first month of life. However late presentation is rare, we present a case report of 58 yr female with tuberculosis transverse colon mass with malrotation with ladd's band with sub acute intestinal obstruction. She presented with epigastric pain, mass and vomiting. Patient underwent laparoscopic ladd's procedure and descending colon and ileum bypass with ileo descending anastomosis, She had good postoperative recovery. In this article we describe our experience in creating descending colon and ileum bypass with ileo descending anastomosis.

KEYWORDS

laparoscopic ladd's procedure, transverse colon mass, bypass, ladd's band

INTRODUCTION

Malrotation is typically diagnosed in the first few months of life, and 90% of cases are diagnosed during the first year. However, adult midgut malrotation is very rare and its incidence has been reported to be between 0.0001% and 0.19%. Most adult diagnoses of midgut malrotation are made in asymptomatic patients; either on imaging investigations for unrelated conditions or at operations for other pathology. This scenario of incidental diagnosis is becoming increasingly common, particularly with improvements, and increased use, of diagnostic imaging techniques in modern practice [1] there are a small proportion of affected adults who may present with acute or chronic symptoms of intestinal obstruction or intermittent and recurrent abdominal pain. The diagnosis in this age group is fraught with immense difficulty, especially because the typical presentation is with non-specific symptoms.[2] The ladd's procedure is the standard corrective measure for intestinal malrotation in children and consists of division of peritoneal bands (ladd's bands) traversing the posterior abdomen, reduction of volvulus, appendectomy, and functional positioning of the intestine with or without fixation[3]

CASE REPORT

A 58/F patient presented with pain abdomen on/off since 5 months, vomiting since 5 days and reduced appetite since 3 months. On physical examination, she was afebrile and vitally stable. Her abdomen was soft, pain was present in epigastric region with mass of around 4x3 cm felt in epigastric region. Her blood and routine examinations were normal.

USG showed thickening of bowel, and multiple enlarged mesenteric lymph nodes.

CT scan showed: Partial Malrotation with DJ flexor in right paramedian location, Circumferential mural thickening of hepatic flexure and transverse colon result in luminal narrowing, metastatic lymphadenopathy.(fig1)

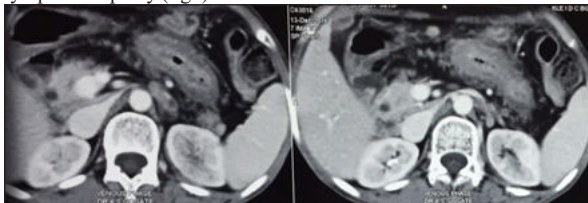


Fig1- Transverse Colon luminal thickening

Colonoscopy showed: ?CA Transverse Colon, ?TB colitis, ?Crohn's disease Biopsy report came as TB colitis. Antitubercular drug was started, but patient presented with pain abdomen and vomiting after 15 days so diagnostic laparoscopy was processed.

Diagnostic laparoscopy was performed. The surgeon and camera was

at patient's left side. A 10mm port was placed in umbilicus by open hassons technique. The abdomen was insufflated 14mm Hg with CO₂. 10mm suprapubic port was placed. Two additional 5mm trocars were placed under direct vision in the right and left flanks. The procedure began by exploration of abdomen. The ileocaecal junction, caecum with appendix was seen to occupy the right hypochondrium. Most of the small intestine was found on right paracolic gutter and was collapsed. The descending aorta was clearly visible indicating absence of small bowel mesentery on left side (fig2) and Ladd's band was seen from duodenum to caecum (fig3). Ladd's band was divided using scissor, sharp dissection and electrocautery. After completion of Ladd's procedure the DJ flexure was seen to occupy right of abdomen. Incomplete malrotation was converted to complete non-rotation. Due to presence of mass in transverse colon Bypass was created by anastomosing Descending colon with ileum. 4 layer closure technique was used. 1st layer was closed by laparoscopy and other 3 layers were closed by making 5 cm incision on abdomen. Drain was kept through 5mm port. Postoperative was uneventful. Patient started orally on day 3.

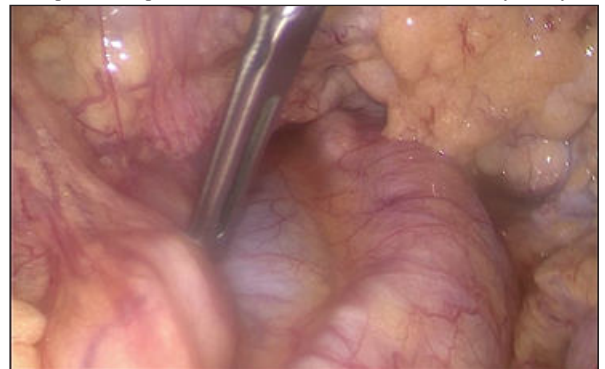


Fig2 - Shows Descending Aorta Was Clearly Visible Indicating Absence Of Small Bowel Mesentery On Left Side

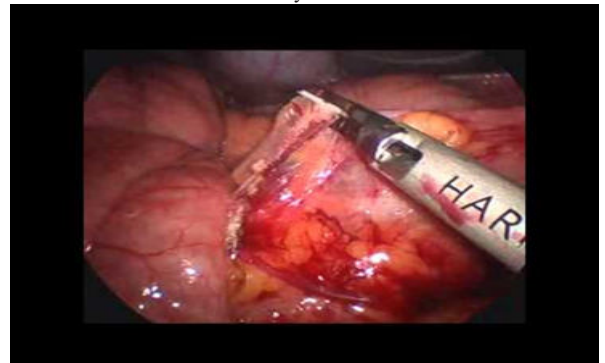


Fig3- LADDS Band Was Seen From Duodenum To Caecum

DISCUSSION

Midgut malrotation is broadly considered a deviation from the normal 270 degree counterclockwise rotation of the gut during embryonic development. The shortened mesentery allows the small bowel and mesentery to twist and wrap around the narrowed SMA pedicle to create a distinctive 'whirlpool' appearance on CT scan[1].

Mesenteric angiography was previously used but is now rarely indicated in the evaluation of malrotation. It has the capacity to demonstrate the abnormal relationship between, and detect the patency of, the mesenteric vasculature. Angiography was used to demonstrate the characteristic corkscrew appearance of a whirling SMA and its branches; the barber pole sign[2].

The classical Ladd's Procedure consists of 4 parts: division of Ladd's bands overlying the duodenum; widening of the narrowed root of the small bowel mesentery by mobilizing the duodenum and division of the adhesions around the SMA to prevent further volvulus [3].

CONCLUSION

The Ladd's procedure may be performed safely, with a high degree of patient satisfaction, by a laparoscopic approach in adults. It decreases hospital stay and faster recovery as compared to open with lesser post operative complications.

REFERENCES

- [1] K Prasan, D Abhishek, V Bhaskar, Adult Midgut malrotation with Ladd's band, Bali Med J 2014 Volume 3 137-142.
- [2] F Okiemute, F Emanuwa, A Abraham, D Tony, Midgut malrotation first presenting as acute bowel obstruction in adulthood, WJES 2011 June; 6(22):2-6.
- [3] E Neal, MD Seymour, K Dana, MD Anderson, Laparoscopic Treatment of Intestinal Malrotation in Adults, JSLS. 2005 Jul; 9(3): 298-301.