



Case Report

A CASE REPORT ON TRANSVERSE COLON VOLVULUS

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ABSTRACT

We are hereby presenting a single case report on Transverse colon volvulus, as it is known to be so rare as to call it a once in a surgical lifetime diagnosis. Many surgeons go through their entire careers without coming across even a single such case. Altogether, only 100 cases have been documented in medical literature so far.¹This makes it imperative that we disseminate the available knowledge regarding this condition, so as to allow for better patient management by facilitating early diagnosis and prompt management.

Key words:

volvulus, colon, mesentery

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INTRODUCTION

A 19-year-old female presented with complaints of abdominal pain and multiple episodes of vomiting of 1 day duration on 10th August, 2019 to the Emergency department of Kottayam Medical College.

Her pain was insidious in onset, intermittent, gradually progressing in intensity, and colicky in nature, located over the epigastrium.

Each episode lasting for about an hour, followed by gradual spontaneous relief. The time interval between each becoming more closely spaced with the subsequent attack. No aggravating factors or shifting or radiation of pain

Vomiting was associated with pain. 4 episodes of emesis of bilious material was reported, with mild relief of pain following vomiting.

No history of melena/hematemesis/yellowish discoloration of skin or urine/fever/weight loss/anorexia/bleeding pr/constipation /loose stools

There was no past history or family history of any significant illness including psychiatric disease, eating disorders, chronic constipation or neurological diseases or previous surgeries.

Her physical examination findings were unremarkable with normal Vital parameters.

Her abdominal examination revealed a soft tympanitic abdomen with mild epigastric tenderness and normal bowel sounds on auscultation.

Patient's laboratory parameters were within normal limits.

But her Xray Abdomen showed a dilated colonic loop In the upper half of the abdominal radiograph so a CECT Abdomen was taken for clarifying the diagnosis. Findings were as follows:

Twisting of the mesentery at the level of distal transverse colon causing closed loop obstruction with maximum dilatation of colon being 6.9cm likely distal transverse colon volvulus. Rectally administered contrast noted filling the distal bowel loops up to the site of volvulus with minimal contrast passing into the dilated transverse colon.

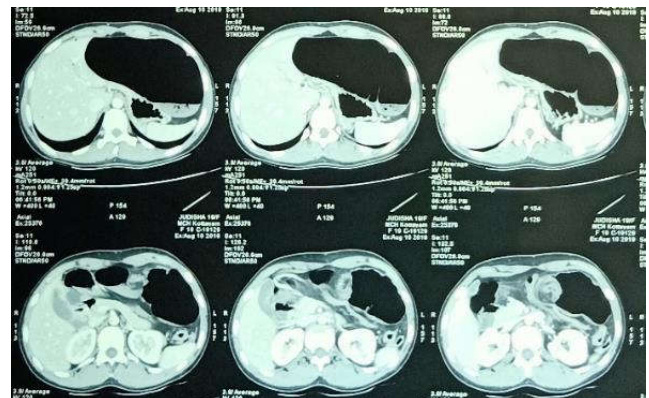


Figure 1 Cross sectional views of the CT film showing hugely dilated and redundant transverse colon

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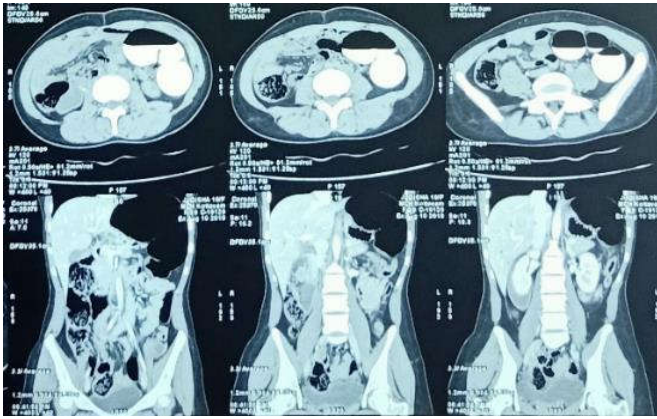


Figure 2 Coronal views of the closed loop obstruction picture on CT scan

With the above diagnosis of transverse colon volvulus established by imaging, she was taken up for exploratory laparotomy

Intraoperatively the following findings were noted:

Torted segment of transverse colon rotated anticlockwise by 2.5 turns around its mesocolon.

This segment appeared dilated with stretching of its taeniae, but was viable.

Transverse mesocolon was lengthy and redundant

No intra-abdominal bands /adhesions/masses encountered

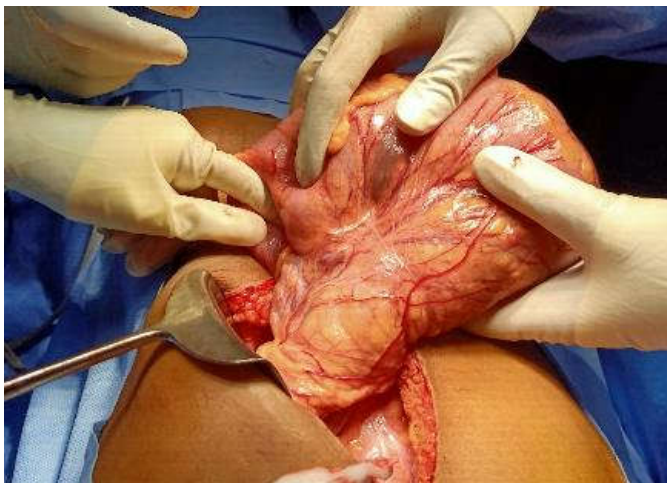


Figure 3 Intraoperative view of the twisted transverse colon

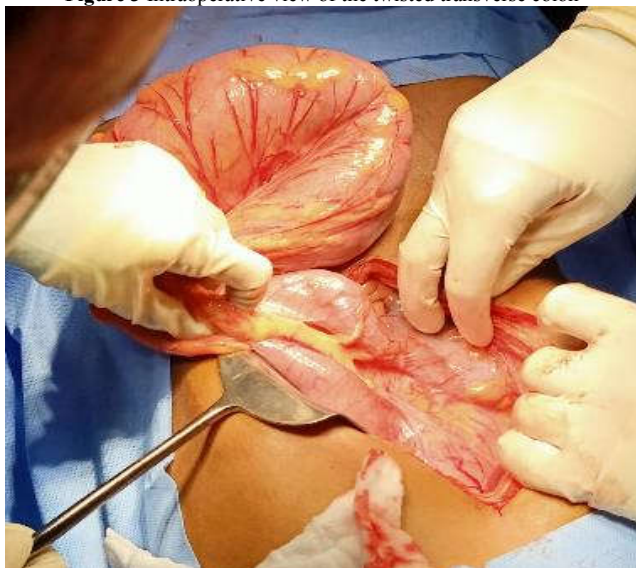


Figure 4 Examining the base of the twisted loop of colon to check for bands/adhesions/masses

Detorsion of the volvulus was carried out by derotating the segment clockwise

The redundant segment was resected and end to end 2 layered colo-colic anastomosis constructed. Post-operatively, patient was relieved of her symptoms. Her Vital signs and systemic findings were normal. On Post-operative day 3 oral liquids were given.

Patient was discharged on Post-operative day 6 after resumption of full oral feeds and passage of stools.

DISCUSSION

The term volvulus is derived from “volvere” meaning “to turn or twist”. The commonest cases of colonic volvulus are seen in the sigmoid colon (60-80%) followed by the caecum.² Transverse colon volvulus attributes for only 3-5 % of intestinal obstructions³. The first such case was reported in 1932 by the Finnish surgeon Kallio.⁴ Since then 100 such cases have been documented in surgical literature till date.

It can be broadly classified into 2 types based on its clinical presentation: the acute fulminant type and subacute progressive type.⁵ Clearly the case described above is of the subacute variety, owing to its less alarming presentation. But if undiagnosed and hence left untreated it can rapidly progress into the fulminant type thus increasing the mortality and morbidity several fold. That is why it is imperative that all surgeons keep in mind the possibility of this diagnosis in a patient who presents with atypical symptoms and signs of subacute intestinal obstruction.

Generally, it is now being suggested that the diagnostic feature is a single large dilated loop of colon with two air-fluid cut offs on a plain radiograph. Unfortunately, not enough literary evidence is available as of now to characterize this condition precisely. It is however accepted widely that congenital malrotation is commonly associated with this condition, followed less commonly by mucositis due to *Clostridium difficile*. Other probable associations include depressive disorder, chronic constipation, eating disorders, neurological illness and previous intra-abdominal surgeries.

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CONCLUSION

By increasing awareness about this extremely rare condition, we hope to equip the medical community with the means to promptly diagnose and treat such cases. This will help in improving patient survival rates and decrease the occurrence of unwanted misdiagnoses.

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