



Contents lists available at ScienceDirect

## International Journal of Surgery Case Reports

journal homepage: [www.casereports.com](http://www.casereports.com)

## An unusual case of transverse mesocolic internal hernia with abnormality of both hands and high arched feet



Ashish Moudgil<sup>a,\*</sup>, Paras K. Pandove<sup>a</sup>, Amarbir Singh<sup>a</sup>, Megha Pandove<sup>a</sup>, Divya Sharda<sup>b</sup>, Vijay K. Sharda<sup>a</sup>

<sup>a</sup> Department of Surgery, Rajindra Hospital/Government Medical College, Patiala 147001, Punjab, India

<sup>b</sup> Department of Obs & Gynaecology Rajindra Hospital Patiala, India

### ARTICLE INFO

#### Article history:

Received 1 October 2014

Received in revised form 9 October 2014

Accepted 13 October 2014

Available online 11 December 2014

#### Keywords:

Hypoplastic thumb  
Internal herniation  
Intestinal obstruction  
Mesocolic hernia

### ABSTRACT

**INTRODUCTION:** An internal abdominal herniation is the protrusion of a viscus through a normal or abnormal mesenteric or peritoneal aperture. It is a rare cause of small bowel obstruction with a reported incidence of 0.2–0.9%. It can either be acquired through a trauma or surgical procedure or can be related to congenital peritoneal defects. Herniation through transverse mesocolon is very rare.

**PRESENTATION OF CASE:** A case of acute intestinal obstruction due to internal herniation through a congenital rent in transverse mesocolon with rotation of gut approximately 180° around axis of the band. Patient also had bilateral hypoplastic thenar muscles with rudimentary 1st metacarpals and high arched feet. Reduction along with derotation of gut, with closure of the rent in transverse mesocolon and fixation of the caecum to lateral peritoneum was performed.

**DISCUSSION:** The preoperative diagnosis of mesenteric defect is difficult because of wide range of acute abdominal symptoms, and there are no specific radiographic findings. CT is the most important diagnostic tool is, with 77% accuracy in such cases. Due to the risk of strangulation of the hernial contents, even small internal hernias are dangerous and may be lethal.

**CONCLUSION:** Internal hernia should be suspected in patients with signs and symptoms of intestinal obstruction, particularly in the absence of inflammatory intestinal diseases, external hernia or previous laparotomy. Surgical decision-making is on the basis of clinical findings of intestinal strangulation or ischemia, and emergency laparotomy should be performed without preoperative diagnosis of such a rare disease.

© 2014 The Authors. Published by Elsevier Ltd. on behalf of Surgical Associates Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

## 1. Introduction

Internal hernia is a rare cause of small bowel obstruction with a reported incidence of 0.2–0.9%.<sup>1–5</sup> It leads to 0.5–4.1% of the cases of acute intestinal obstruction caused by hernias.<sup>2</sup> It may be either congenital or acquired.<sup>3</sup> These herniations may be persistent or intermittent. Paraduodenal hernias are the most common type of internal abdominal hernias, accounting for over one-half of reported cases.<sup>2</sup> Less common types include mesocolic (transmesenteric) hernia, which occurs following abdominal surgery.<sup>3</sup>

Mesenteric defect can present with intestinal obstruction and cause incarceration or strangulation.<sup>4</sup> Though rare, it should be considered as one of the differential diagnosis in a relatively young patient with bowel obstruction without external hernia or no previous history of any abdominal surgery.<sup>2,4</sup> Key to its successful operative management is timely intervention and to safeguard the

important vascular structures like superior mesenteric and inferior mesenteric vessels, etc. which course through the neck of these hernias with resultant effect on gut.<sup>1</sup>

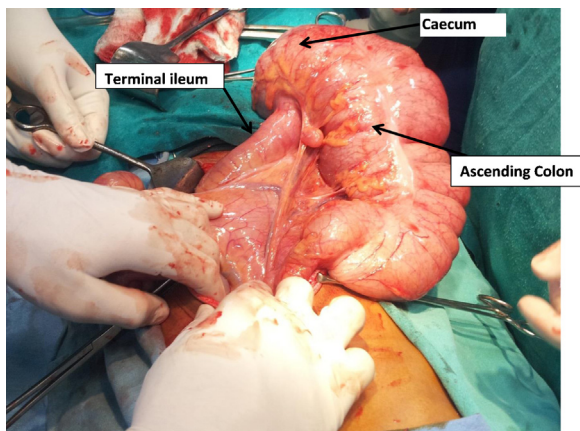
## 2. Case report

A 14-year old male patient presented to emergency department of our hospital with abdominal pain in periumbilical area since 4 days which developed few hours after picking up a sack of wheat, associated with vomiting and abdominal distension with history of not passing flatus since 3 days and passing mucoid stools (2–3 episodes/day). Patient has no other significant past surgical/medical illness.

On examination, patient had tachycardia with BP 116/76 mm Hg. Abdomen was distended and tense with diffuse tenderness and absent bowel sounds. Examination also revealed hypoplastic thenar muscles and hypoplastic thumbs of both hands (Fig. 5a) and also had high arched feet (Fig. 5c). X-ray abdomen revealed dilated gut loops with air fluid interface. X-ray bilateral hands revealed only distal most part of 1st left metacarpal and 1st right metacarpal

\* Corresponding author. Tel.: +91 9988837610.

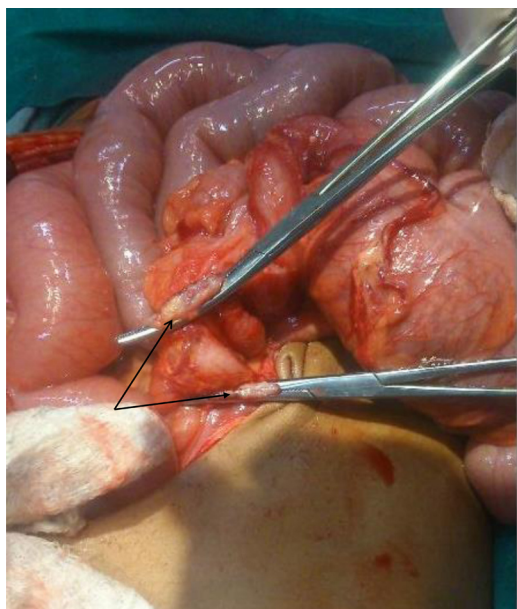
E-mail address: [drashishmoudgil@gmail.com](mailto:drashishmoudgil@gmail.com) (A. Moudgil).



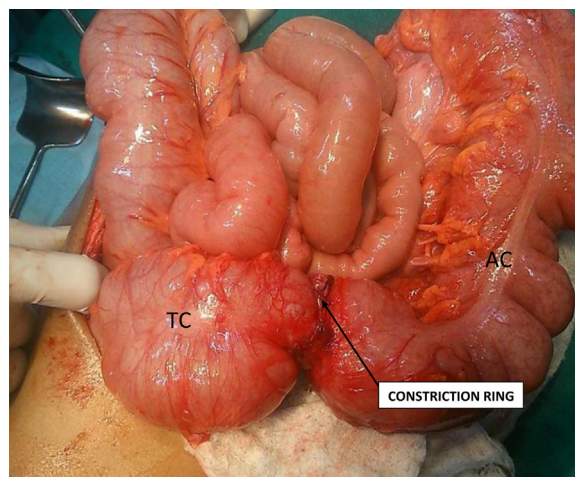
**Fig. 1.** Initial photograph just after opening the abdomen showing distended caecum with ascending colon and terminal ileum.

relatively longer than normal with paucity of soft tissues and absence of normal convexities in the bilateral thenar compartment (Fig. 5b). Ultrasound abdomen showed fluid distended dilated small gut loops measuring about 6 cm in diameter with sluggish peristalsis in lower abdomen. After routine blood investigations and fluid resuscitation, emergency exploratory laparotomy through midline incision was done. It revealed hemorrhagic peritoneal fluid with distended caecum and ascending colon (Fig. 1) which has internally rotated along with ileum and jejunum through a defect in transverse mesocolon and rotated approximately 180° around axis of the band, forming constriction ring just distal to hepatic flexure through lesser sac to the right side of the abdomen almost to its anatomical position anteriorly to band causing massive dilatation of the caecum and ascending colon, which were mobile (because of closed loop obstruction with competent ileocaecal valve) and mild dilatation of the terminal ileum (Figs. 2–4).

There was no other malrotation of gut as evident by normal location of the duodeno-jejunal and ileocecal junctions. Band was divided and herniated gut was reduced through the defect and derotation done along with. No evidence of gangrene/strangulation



**Fig. 2.** Showing divided band (marked by arrows).

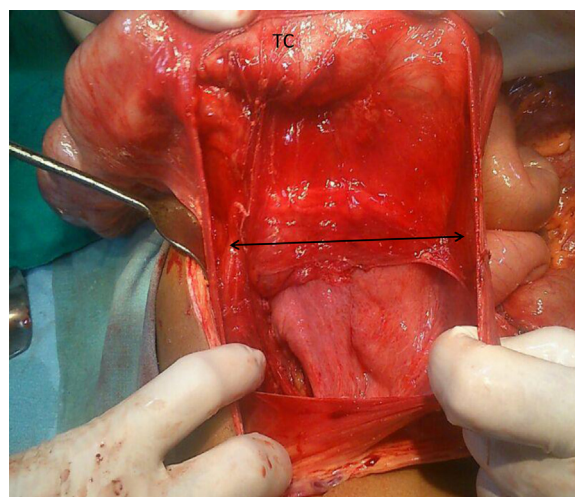


**Fig. 3.** After division of band showing the constriction ring. AC – Ascending Colon; TC – Transverse Colon.

was present. Manual decompression of gut was done distally. Ascending colon, caecum and small gut loops were repositioned back to its anatomical position. Defect in the transverse mesocolon which was about 10 cm in width was closed with silk 2–0. A small serosal defect which was present over caecum was closed by applying lembert sutures with 3–0 vicryl. Caecum was fixed to the lateral peritoneum. Abdomen was closed, after achieving haemostasis and proper peritoneal toileting, in layers over a drain. Appropriate antibiotics were started. Post operatively patient was discharged on 11th day in satisfactory condition. Patient reported back 12 days later with features of sub-acute intestinal obstruction which was managed conservatively and on subsequent follow up patient remained asymptomatic.

**3. Discussion**

Internal hernias are defined as herniation of a viscus, usually the small bowel, through a normal or abnormal orifice within the peritoneal cavity.<sup>2,3</sup> The orifice may be normal (Winslow’s foramen) or paranormal (e.g. hernias through the peritoneal fossa may be paraduodenal, ileocecal, inter- or meso-sigmoidal, paracolic, supramesical, or of the large ligament of the uterus). All these hernias possess a sac and are true hernias. The orifice may be



**Fig. 4.** Showing about 10 cm defect in the transverse mesocolon shown by arrow. TC – Transverse Colon.

Download English Version:

<https://daneshyari.com/en/article/4289484>

Download Persian Version:

<https://daneshyari.com/article/4289484>

[Daneshyari.com](https://daneshyari.com)