International Journal of Research in Medical Sciences
Parikh APK et al. Int J Res Med Sci. 2019 Nov;7(11):4368-4369
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012

DOI: http://dx.doi.org/10.18203/2320-6012.ijrms20195018

Case Report

Intestinal obstruction in case of internal hernia through congenital defect in falciform ligament in adult

Archit Pankaj Kumar Parikh*, Mohan Prakash Tyagi, Dheerta Atul Kapadia

Department of Surgery, PDU Medical College, Rajkot, Gujarat, India

Received: 07 October 2019
Accepted: 14 October 2019

***Correspondence:**
Dr. Archit Pankaj Kumar Parikh,
E-mail: rockstararchit007@gmail.com

ABSTRACT

Small bowel obstruction due to internal herniation of ileum through congenital defect in falciform ligament is exceedingly rare, about 0.2% such cases of hernia through congenital defect in falciform ligament have been reported. The case presentation of 60 year old male patient present in surgery department with acute abdominal pain since 7 days. Based on clinical assessment and radiological evidence, intestinal obstruction was diagnosed. For which patient underwent exploratory laprotomy. The discussion of Intraoperative a loop ileum was found obstructed in congenital defect in falciform ligament. Obstruction was relieved by division of leaf of defect, without the need of intestinal resection.

Keywords: Falciform ligament, Internal hernia, Obstruction

INTRODUCTION

Most common causes of intestinal obstruction are post-operative adhesions and bands. Internal hernia leading to obstruction account for around 2% cases.[1] It is defined as protrusion of an abdominal organ through a mesenteric or peritoneal hole, which can be related to congenital defects or failure of embryological development or acquired related to trauma and iatrogenic caused by surgical procedure.[2-4]

Few commonly encountered internal hernias are- para-duodenal, pericaecal, transmesentric, paravesical. Herniation through falciform ligament defect (congenital or acquired-post port insertion for laproscopic procedure) remains a rare entity. Falcifrom ligament is a broad and thin peritoneal fold, sickle shaped, remnant of ventaral mesentery of fetus, which attaches liver to ventral body wall. Literature shows that 0.2% hernia occurs through defect in falciform ligament.[5] About 35 cases have been reported so far.

CASE REPORT

A 60 years old male patient was admitted in surgery department with complain of generalized abdominal pain for 7 days. Pain was episodic to start with, later became constant, not relieved completely with rest. One episode of non-bilious vomiting one day prior to admission. Patient is chronic smoker (20bidis/day for 40 years). No other medical or surgical past history.

On examination, patient had tachycardia, per abdomen was distended with guarding present. Bowel sounds were hyperperistaltic. No significant per rectal findings.

On investigation, all routine blood investigations were within normal range. Sonography and X-ray abdomen suggestive of intestinal obstruction. CECT abdomen suggestive of gaseous dilation of small bowel loop with collapsed terminal ileal loops in right iliac fossa, distention of caecum, ascending and transverse colon

noted, Descending colon collapsed, vasculature normal, multiple sigmoid diverticula were noted.

As a part of treatment, exploratory laprotomy was undertaken in which ileal loop (Figure 1) approximately 30 cm length was herniating through defect in falciform ligament (Figure 2), which was congenital as there is no past operative history. Ileal loops were released by laying open the defect. As bowel loops showed no signs of congestion and showed normal peristalsis, there was no need for resection. Rest of viscera examined and found normal. No surgical intervention carried out for sigmoid diverticula. Patient had smooth post-operative recovery.

Figure 1: Segment of ileal trapped in defect.

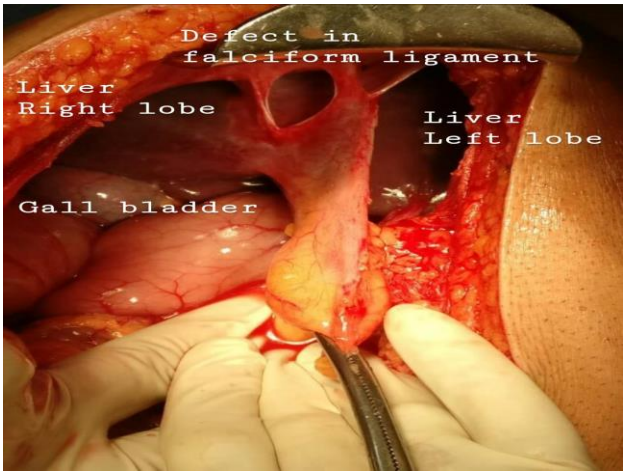

Figure 2: Congenital defect in falciform ligament.

DISCUSSION

The incidence of intestinal obstruction in case of internal hernia ranges from 2-4%, from which through falciform ligament defect are 0.2%.[5] The cause of defect may be congenital (in case of malformation and incomplete development of falciform ligament) or acquired (iatrogenic defect created by port insertion for laproscopic procedures, commonly for bariatric, cholecystectomy).[6] In this patient as there is no previous operative history, defect is termed congenital. Though the defect was congenital, it had its manifestation in geriatric age. In cases such as this, besides clinical examination, CT scan plays important role in deciphering the cause of intestinal obstruction. Though the diagnosis remains rare, possibility of internal hernia through such defect should be born in mind. Prompt diagnosis and management remains the key in such cases.

CONCLUSION

Authors present a rare case of small bowel obstruction because of internal herniation through congenital defect in falciform ligament. Clinical examination aided with radiological findings assisted the pre-operative diagnosis. Prompt diagnosis and timely surgical intervention precludes the strangulation. The same condition can also be managed with minimal invasive surgery.

ACKNOWLEDGEMENTS

Authors would like to be acknowledged Department of Surgery, PDU Medical College, Rajkot, Gujarat, India.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Meyers MA. Dynamic Radiology Of The Abdomen: Normal And Pathologic Anatomy Springer Verlag, 4th Ed. Chapter no. 1, New York, NY;1994:13.
2. Gullino D, Giordano O, Gullino E. Internal hernia of the abdomen. Apropos of 14 cases. J de chirurgie. 1993;130(4):179-95.
3. Molloy RG, Ellamushi H, Smith IS. Strangulated small bowel hernia of the falciform ligament. British J surg. 1992;79(6):570.
4. Blunt A, Rich GF. Intestinal strangulation through an aperture in the falciform ligament. Australian and New Zeal J Surg. 1968 Feb;37(3):310.
5. Wiseman S. Internal herniation through a defect in the falciform ligament: a case report and review of the world literature. Hernia. 2000;4(2):117-20.
6. Anthony C, Shaikh AA, Shirley D, Edward K. Falciform ligament hernia after laparoscopic cholecystectomy: a rare case and review of the literature. The Am surg. 2005;71(4):359-61.

Cite this article as: Parikh APK, Tyagi MP, Kapadia DA. Intestinal obstruction in case of internal hernia through congenital defect in falciform ligament in adult. Int J Res Med Sci 2019;7:4368-9.