MEGA JOURNAL OF CASE REPORTS

OPEN ACCESS

Case Presentation

Compiled Date: May 09, 2025

Singular Case of Small Intestinal Internal Hernia: How Laparoscopy can Help for Diagnosis E Treatment

Massimo Villa, Sarah Lo Faso*, Antonio Greco, Giorgio Firmani and Vito Bruno Dell'Olio

Department of Emergency, Policlinico Tor Vergata Hospital, Italy

***Corresponding author**: Sarah Lo Faso, Department of Emergency, Policlinico Tor Vergata Hospital, Rome, Italy, Tel: 3207961059

Abstract

A man aged 81 years presented with a rare case of internal hernia complicated by intestinal obstruction and ischemia of the jejunum, a condition that is relatively uncommon and often diagnosed only in the context of nonspecific obstructive syndrome (Elsevier Masson SAS, 2013). Internal hernias, characterized by the passage of intestine through natural or abnormal intra-abdominal openings, exhibit complex anatomical and clinical variations. In this case, the intraoperative findings revealed incarcerated and ischemic jejunal loops, with volvulus of the terminal segment. The surgical procedure involved partial intestinal resection and lysis of adhesions to prevent future incarcerations. The procedure concluded with an anastomosis of the lateral-lateral anisoperistaltic type. The patient was monitored post-operatively with blood tests and a perianastomotic drain placed in the pelvis.

Preface

Internal hernias, although rare, constitute one of the main etiologies of acute intestinal obstruction, with a high risk of evolving into ischemia and necrosis of the intestinal tissue [1,2]. They are divided into different anatomical typologies, such as hernias through natural orifices, such as Winslow's [3] hiatus, or abnormal ones, such as transepiploic, transmesenteric and transmesocolic hernias, or even retro- and subperitoneal, including paraduodenal [4,5] and pericecal [6] hernias. In this specific case, the intraoperative diagnosis of internal hernia complicated by jejunal ischemia and intestinal occlusion outlined a picture of extreme surgical urgency, requiring immediate and decisive intervention in order to avoid serious sequelae such as intestinal perforation and sepsis.

Case Presentation

An 81-year-old man comes to the emergency room with abdominal pain associated with vomiting that began approximately an hour after consuming the

meal. In his medical history he reports a previous cerebral stroke dating back to approximately 4 years ago. On physical examination the patient presented with a treatable abdomen, painful on deep palpation in the left side and ipsilateral iliac fossa with positive Blumberg, increased enterocolic tympanism, torpid peristalsis, bowel movement reportedly open to gas. Vital signs within normal limits, no fever, no dyspnea, normal oxygen saturation, no leukocytosis, and no increase in inflammatory markers in blood tests. Subsequently complete abdominal CT [7] **(Figure A-D)** which reports: "...On the left side they are documented some tenual loops with a convoluted course with apparent two jumps in caliber, characterized by stratified thickening of the walls as if due to suffering of the same; concomitant swirling appearance of the tributary mesenterial vessels, imbibition of the mesenteric fan and the left parietocolic shower, in the absence of a clear cleavage plane with the adjacent descending colon...". About the clinical, laboratory and instrumental picture, he carried out specialist general surgery consultancy which indicated the need to carry out urgent surgery.

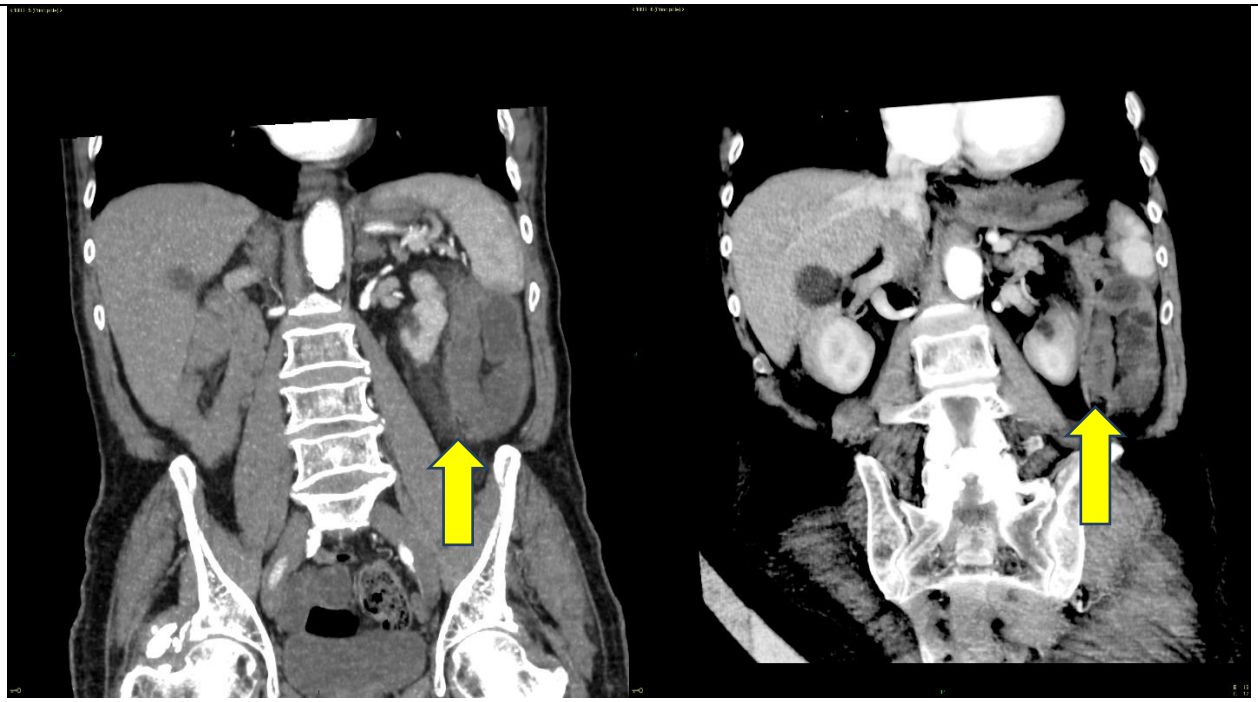

Figure A and B.

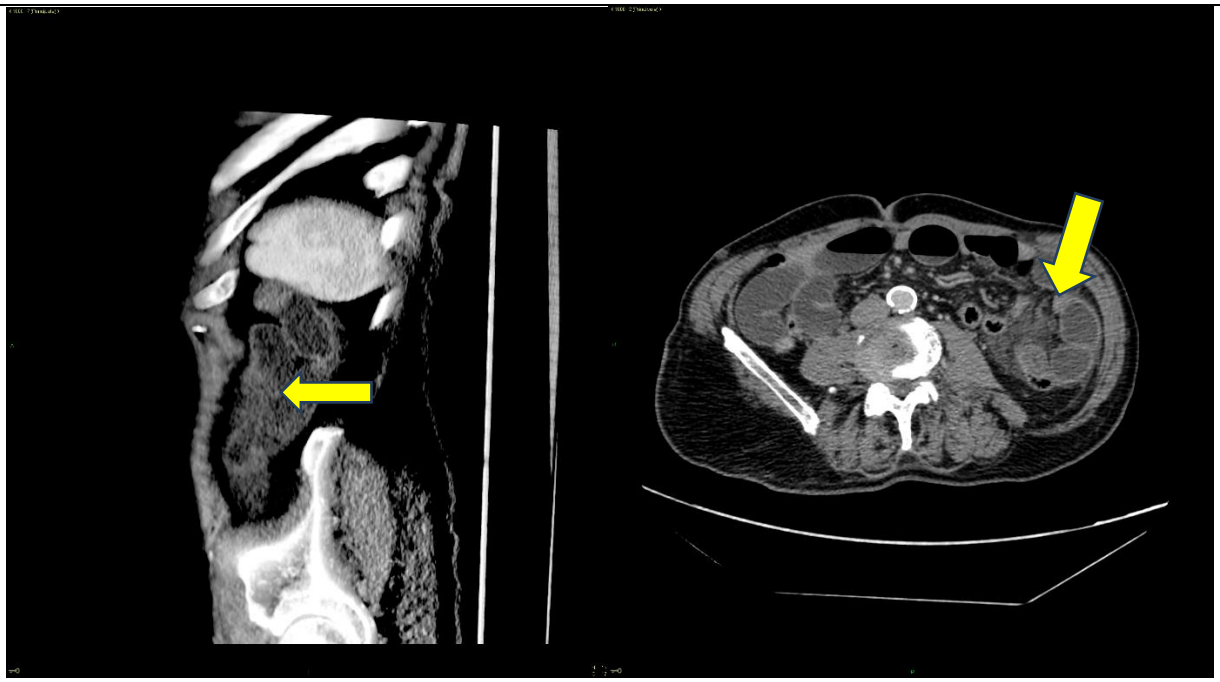

Figure C and D:

Surgery

The operation consisted of an exploratory laparoscopy [8]. The inspection revealed the presence of jejunal loops incarcerated in the left flank, which penetrated through a defect in the left parietocolic peritoneal reflection **(Figure 1 and 2)**. We then proceeded with the extraction of approximately 40 cm of jejunum, which ran posterior to the descending colon, crossing the gap located at the left colic angle **(Figure 3 and 4).** Of this intestinal tract, the terminal portion appeared to be twisted on itself and showed signs of ischemic suffering **(Figure 5)**. Later, an anisoperistaltic lateral-lateral entero-enteric anastomosis was performed with the aid of the same mechanical stapler and the resected intestinal segment was sent for definitive histological examination (EID).

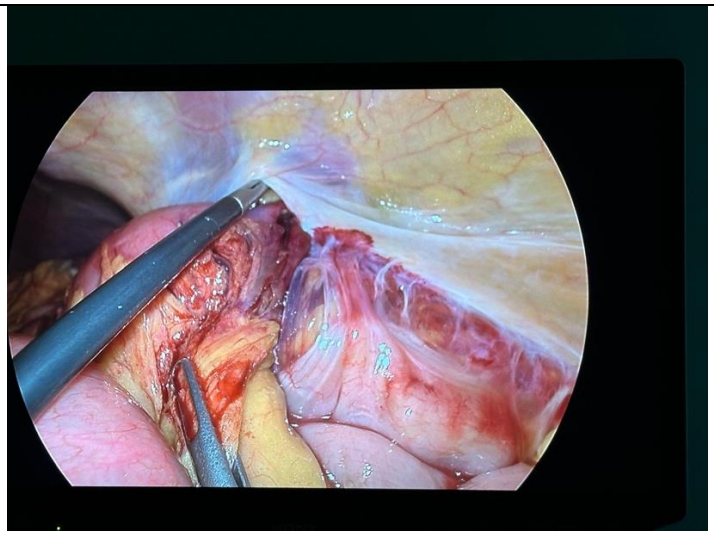

Figure 1.

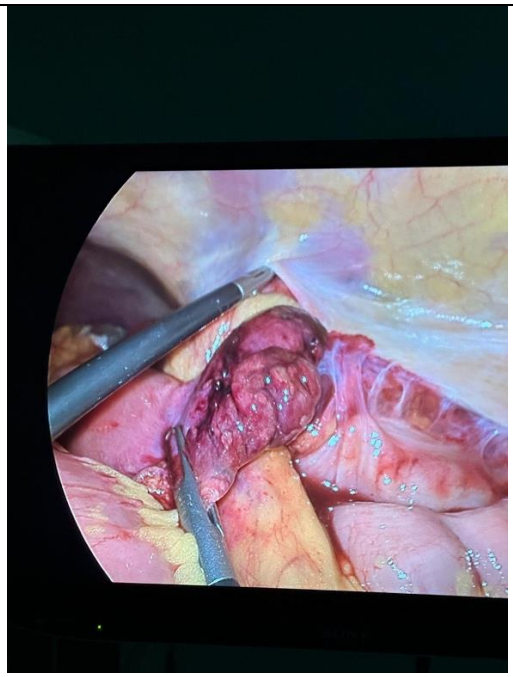

Figure 2.

Figure 3.

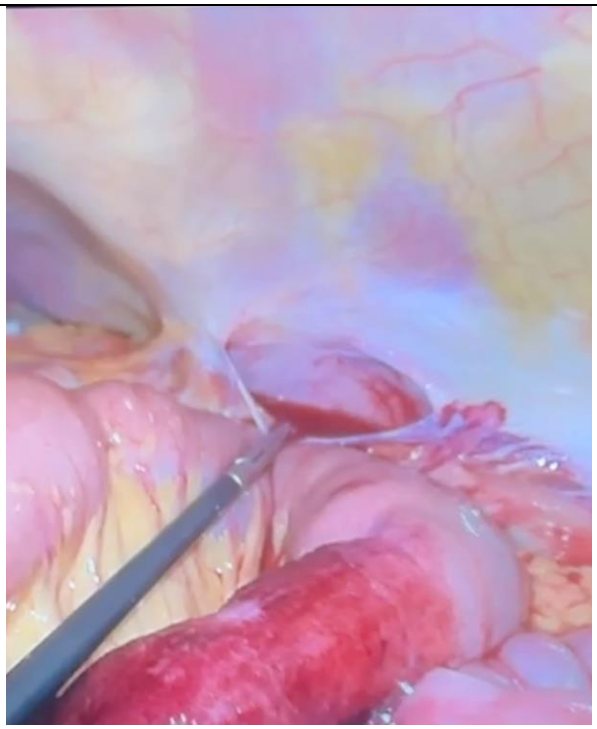

Figure 4.

Figure 5

Postsurgical

The post-operative course was free of medical and surgical complications. The patient was discharged on the sixth postoperative day.

Conclusion

The patient's clinical presentation is consistent with acute small bowel obstruction, characterized by abdominal pain and vomiting. In most cases, the physical examination is unremarkable, although sometimes an abdominal mass may be present. Numerous authors report the occurrence of recurrent

abdominal pain and hospital admissions without a precise etiological diagnosis in the years preceding the acute episode. In other cases, the acute presentation may be preceded by milder, isolated, or intermittent postprandial abdominal pain episodes. The key diagnostic tool for the early detection of this condition is a contrast-enhanced abdominal CT scan **[9]**. In this context, the radiologist's role becomes crucial, not only for an accurate diagnosis but also for determining the appropriate therapeutic approach, ensuring the patient receives targeted and effective treatment.

References

1. Echaïeb L. Hrarat, H. Kotobi. Trattamento chirurgico elle ernie interne, I-40-445; EMC - Tecniche Chirurgiche Addominali, ElsevierMasson SAS; Paris, 2013.
2. Thierry Merrot, Robert Anastasescu, Taras Pankevych, Katia Chaumoître, Pierre Alessandrini. Small bowel obstruction caused by congenital mesocolic hernia: case report. J Pediatr Surg. 2003;38(9):E11-2.
3. Demetrios Moris, Diamantis I. Tsilimigras, Babatunde Yerokun, Keri A. Seymour, Alfredo D. Guerron, Philip A. Fong, EleftheriosSpartalis, Ranjan Sudan. Foramen of Winslow Hernia: a Review of the Literature Highlighting the Role of Laparoscopy. J Gastrointest Surg. 2019;23(10):2093-2099.
4. Ben M. Willwerth, Robert M. Zollinger, Robert J. Izant. Congenital mesocolic (paraduodenal) hernia: Embryologic basis of repair. Am J Surg. 1974;128(3):358-61.
5. Shukla AA, Bale M, Soltun T. Paraduodenal hernia. Tidsskr Nor Laegeforen. 2023;143(8).
6. Koichi Inukai, Eri Tsuji, Shuhei Uehara. Paracecal hernia with intestinal ischemia treated with laparoscopic assisted surgery. Int J Surg Case Rep. 2018:44:20-23.
7. Hong SS, Kim AY, Kim PN, Lee MG, Ha HK. Current diagnostic role of CT in evaluating internal hernia. J Comput Assist Tomogr. 2005;29(5):604-9.
8. Xianqing S, Wei S, Zhixian L. Riparazione laparoscopica di un'ernia interna congenita dovuta all'apertura peritoneale. Asiatico J Surg. 2021;44 (10):1328-1329.
9. Zhang X, Zhang L. "CT and MRI of Internal Hernias: Imaging Features and Differential Diagnosis." Eur J Radiol. 2015;84(7):1301-1310.

Citation of this Article

Villa M, Faso SL, Greco A, Firmani G and Dell'Olio VB. Singular Case of Small Intestinal Internal Hernia: How Laparoscopy can Help for Diagnosis E Treatment. Mega J Case Rep. 2025;8(5):2001-2006.

Copyright