International Journal of Research in Medical Sciences
Rathod A et al. Int J Res Med Sci. 2024 Jun;12(6):2160-2162
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012

DOI: https://dx.doi.org/10.18203/2320-6012.ijrms20241582

Case Report

A rare case of obstructed lumbar hernia: case report

Ankit Rathod[1], Divya Jyoti Banerjee[1]*, Hemang Panchal[1], Urja Mehta[2]

[1]Department of General Surgery, Sola Civil Hospital, Ahmedabad, Gujarat, India
[2]Department of General Medicine, Kumud Heart Hospital, Naranpura, Ahmedabad, Gujarat, India

Received: 17 April 2024
Accepted: 15 May 2024

***Correspondence:**
Dr. Divya Jyoti Banerjee,
E-mail: div97banerjeee@gmail.com

ABSTRACT

Lumbar hernias are quite uncommon as compared to other ventral abdominal wall hernias, accounting for less than 1.5% of all abdominal hernias, with fewer than 300 cases reported over the past 300 years. About 25% of all lumbar hernias have a traumatic etiology. This may be post-surgical or following blunt injuries associated with intra-abdominal injuries. The management of such patients constitutes a surgical challenge. Clinical diagnosis of this entity is difficult due to non-specific symptoms. The diagnosis is particularly elusive in obese individuals or in post-surgical patients. Though rare defects, lumbar hernias are prone to incarceration and strangulation. CECT will provide valuable insight into diagnosis of lumbar hernia especially if obstructed or strangulated. Here we present a case report of a rare presentation of obstructed lumbar hernia diagnosed with CT scan and managed with exploratory laparotomy.

Keywords: Lumbar hernia, Small bowel obstruction, Exploratory laparotomy

INTRODUCTION

Lumbar hernias are uncommon and occur when the intraperitoneal or extraperitoneal contents push through a defect in the lower back muscles.[1] Most of them occur through inferior lumbar triangle of petit bounded below by the crest of ileum- laterally by external oblique muscle and medially by latissimus dorsi. Less commonly the sac comes through the superior lumbar triangle bounded by 12th rib above medially by sacrospinalis and laterally by the posterior border of internal oblique.[2] Although described historically, diagnosing them can be tricky, especially for patients carrying extra weight or those with past surgeries. While basic X-rays and ultrasounds might provide some clue, a CT scan of the abdomen is the most accurate way to confirm a lumbar hernia.[3]

This case report presents a challenging situation of a obstructed lumbar hernia in a 70-year-old male.

CASE REPORT

A 70-year-old male presented with a three-day history of generalized abdominal pain, multiple episodes of bilious vomiting and constipation. He had no history of fever or recent abdominal trauma. His past medical history included a left lower back injury ten years' prior, resulting in a hematoma (blood clot) that required surgical drainage. There was no family history of gastrointestinal problems. On examination, his vital signs were significant only for tachycardia. On examination, per abdomen revealed a soft, non-tender, and non-distended abdomen.

Abdominal X-ray (erect) showed dilated bowel loops suggestive of obstruction.

The ultrasound examination suggested a 2.3 cm defect in the left lower back wall, containing edematous loops of jejunum.

Figure 1: Lower lumbar hernia.

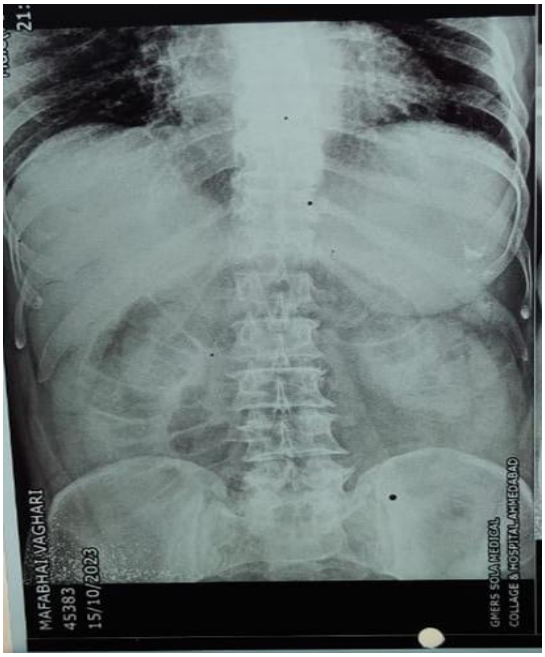

Figure 2: Erect abdominal X-ray showing dilated bowel loops with haustration.

The CECT scan confirmed a left-sided lumbar hernia with a 1.8 cm defect and a dilated bowel loop proximal to the hernia. These findings were consistent with a small bowel obstruction.

Due to the bowel obstruction, the patient underwent an emergency midline laparotomy. The surgery revealed a viable jejunal loop trapped within the hernia sac along with omentum. The surgeon carefully released adhesions and then placed a polypropylene mesh patch to repair the defect in the abdominal wall via a separate incision in the lumbar region. The abdomen was then closed in layers.

The patient recovered well and was discharged after six days without complications. Follow-up examinations confirmed continued recovery.

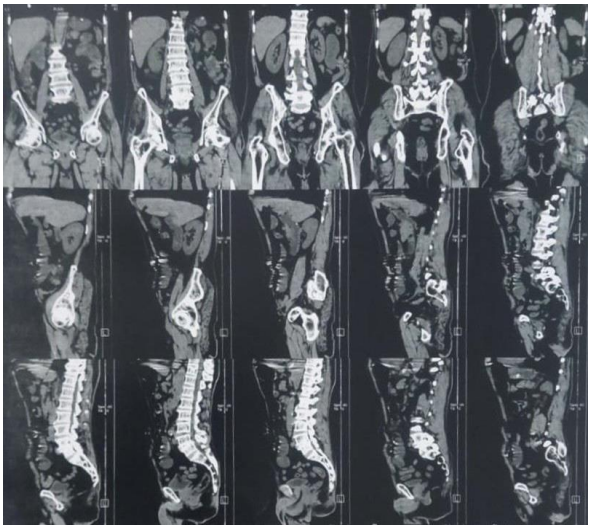

Figure 3: CECT abdomen suggestive of hernia associated with small bowel obstruction.

Figure 4: Intraoperative photograph showing mesh which was placed in lumbar region.

DISCUSSION

Lumbar hernias can be caused by various factors, including trauma, prior surgery, infection, or age-related weakening of the abdominal wall muscles.[4] They can occur in different locations within the lumbar region. While most patients with lumbar hernias experience no symptoms, some may present with lower abdominal pain, backache, or a palpable mass in the lower back. Obesity

can further complicate diagnosis by obscuring physical examination findings.[5]

This case exemplifies the diagnostic challenges associated with lumbar hernias, particularly in patients with vague symptoms and a history that might mask the underlying condition. The initial enema treatment for constipation likely contributed to the delay in diagnosis. In this instance, CT imaging played a crucial role in establishing the diagnosis and guiding surgical management. CT scans are considered the gold standard for diagnosing lumbar hernias due to their ability to accurately identify the hernia contents and assess for complications.[6]

Surgical repair is the definitive treatment for lumbar hernias, especially in cases of obstruction or strangulation (loss of blood supply to the trapped tissue). Various surgical approaches can be employed, ranging from simple anatomical repair to techniques utilizing mesh or grafts. The choice of repair method depends on the specific characteristics of the hernia and the presence of complications.[7] In this case, due to the bowel obstruction and the need to assess the viability of the trapped bowel loop, a laparotomy was chosen. Since no signs of infection were present intraoperatively, a mesh repair was performed in the lumbar region.

CONCLUSION

This case report highlights the importance of considering lumbar hernias in the differential diagnosis of patients presenting with abdominal pain, particularly those with a history of trauma or previous surgery. Early diagnosis and surgical intervention are crucial to prevent complications like bowel obstruction and tissue damage. CT scans are a valuable tool for identifying elusive lumbar hernias, and surgical expertise remains essential for definitive management.

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

REFERENCES

1. Stamatiou D, Skandalakis JE, Skandalakis LJ, Mirilas P. Lumbar hernia: surgical anatomy, embryology, and technique of repair. Am Surg. 2009;75:202–7.
2. Shackelford's Surgery of the Alimentary Tract. 8th edition. Elsevier: Philadelphia; 2019: 606.
3. Sartelli M, Coccolini F, van Ramshorst GH, Campanelli G, Mandalà V, Ansaloni L. WSES guidelines for emergency repair of complicated abdominal wall hernias. World J Emerg Surg. 2013;8(1):50.
4. Walgamage TB, Ramesh BS, Alsawafi Y. Case report and review of lumbar hernia. Int J Surg Case Rep. 2015;6:230–2.
5. Alfredo M-E, Enrique GB, Miquel CC, José Antonio TM, José LA. Controversies in the current management of lumbar hernias. Arch Surg. 2007;142:82–8.
6. Killeen KL, Girard S, DeMeo JH. Using CT to diagnose traumatic lumbar hernia. AJR Am J Roentgenol. 2000;174:1413–5.
7. Zinner MJ, Ashley SW. Maingot's Abdominal Operations. 12th edition. United States: McGraw Hill Professional; 2012: 148–9.

Cite this article as: Rathod A, Banerjee DJ, Panchal H, Mehta U. A rare case of obstructed lumbar hernia: case report. Int J Res Med Sci 2024;12:2160-2.