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Case Report

Strangulated lumbar hernia: an exceptional case of intestinal obstruction

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ABSTRACT

Lumbar hernia is a rare condition and about 325 cases reported so far, not more than 30 cases of strangulated lumbar hernia have been reported in the surgical literature since 1889. Therefore, diagnosis can be easily misdiagnosed. We present a case of a 75-year-old gentleman, who had come with acute intestinal obstruction with strangulated right inferior lumbar hernia. We did exploratory laparotomy with resection and anastomosis and repair of hernia defect. As per our observation this is 31st reported case of strangulated/obstructed lumbar hernia in literature.

Keywords: Emergency hernia surgery, Lumbar hernia, Strangulation

INTRODUCTION

Lumbar hernia is a rare hernia with approximately only 300 cases reported in literature since it was first described in 1672 by Barbette.[1] Lumbar hernia can be classified into primary or secondary, congenital, or acquired hernia. Due to the rarity of this hernia, complications like strangulation or incarceration are very rarely reported. Therefore, there are no specific guidelines for management of such hernias. To best of our observation, this is 31st case of strangulated/incarcerated lumbar hernia reported in literature so far.[1,4-26]

CASE REPORT

A 75-year-old man presented with abdominal distension and vomiting for last 5 days and swelling in right lumbar region since 1 year, which was painful since last 2 days. He was a farmer by occupation, living in a remote area. On physical examination, the patient was dehydrated; abdomen was distended with around 8x9 cm tender irreducible swelling over right lumbar region. He was resuscitated with intravenous fluids. His outside USG report was suggestive of abscess in right lumbar region for which he was referred to our hospital. As the symptoms were suggestive of acute intestinal obstruction, CT abdomen was done which revealed right inferior lumbar hernia just above the iliac crest causing herniation of distal ileal loops.

Diagnosis of right inferior lumbar obstructed hernia with possibility of strangulation was established and the patient was posted for emergency surgery.

Due to suspicion of strangulated hernia, exploratory laparotomy with midline incision was performed. During exploration, omentum and proximal ileal loop was seen herniating through right inferior lumbar hernia defect just above right iliac crest. With gentle maneuver, omentum and ileal loop were reduced back in abdomen. Around 5 cm of ileal loop was gangrenous with small perforation and no signs of viability even after application of warm mop over it for 15 minutes. The gangrenous part was resected and end to end anastomosis was done with absorbable sutures. Hernial sac was removed and cavity was cleaned with thorough saline wash. Hernia defect

was closed with prolene 1-0 by approximating external oblique muscle with latissimus dorsi muscle. Post operatively, patient recovered gradually and was discharged on post operative day 9. Post operative period was uneventful. As of now on 1 year follow up patient is having no recurrence.

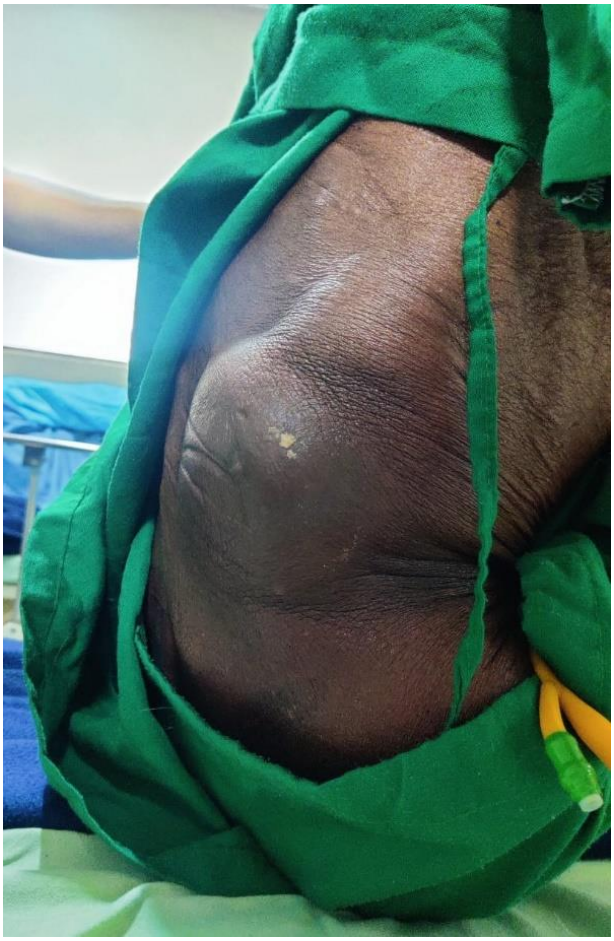

Figure 1: Preoperative right lumbar swelling.

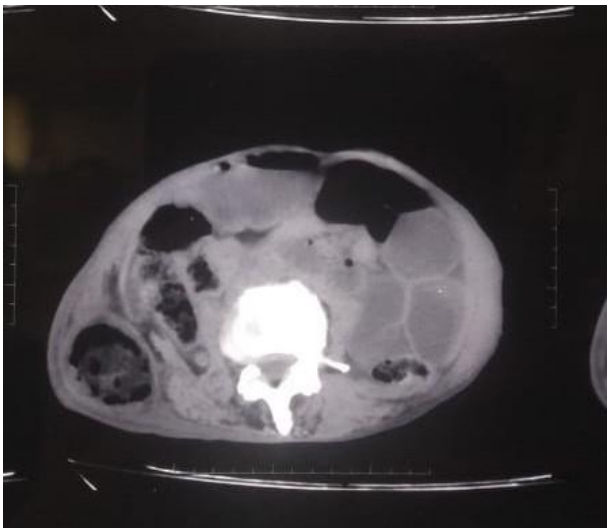

Figure 2: CT abdomen showing right lumbar hernia with bowel as content and dilated small bowel loops.

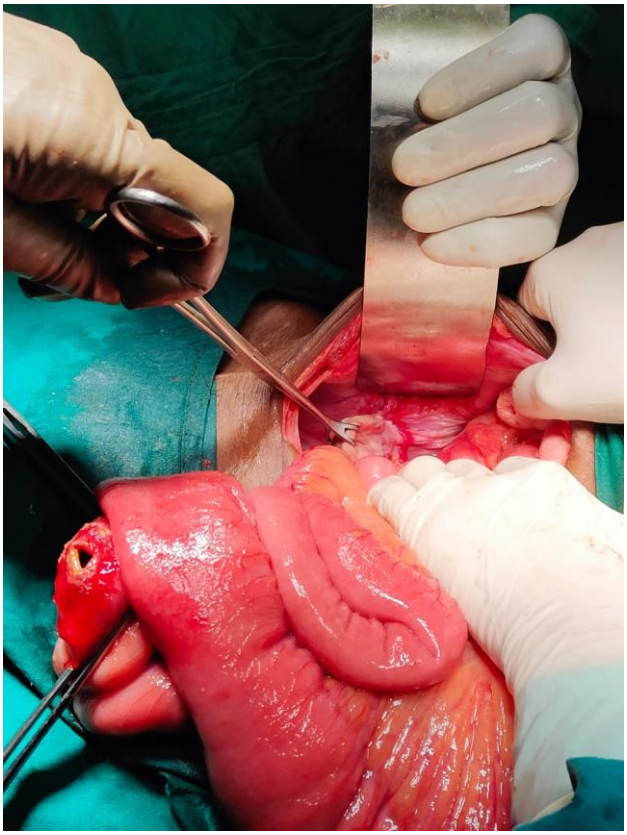

Figure 3: Intraop picture after reducing contents of strangulated hernia. Hernia sac has been reduced.

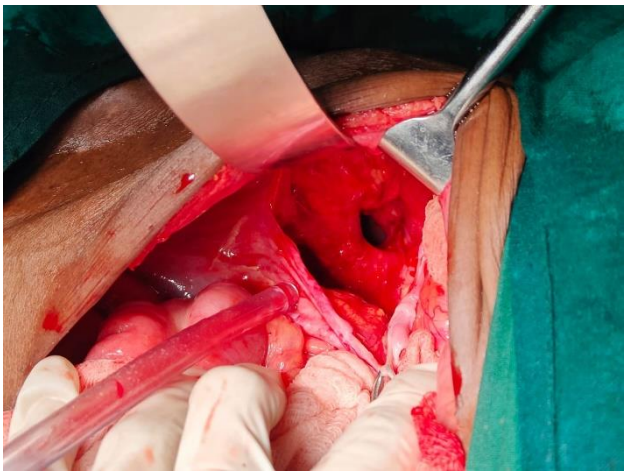

Figure 4: Intraop picture of lumbar hernia with defect after removal of peritoneum.

DISCUSSION

Lumbar hernia is a rare abdominal hernia. It was first described by Barbette in 1672. The first case was published by Garangeot in 1731. H. Ravaton performed first surgical treatment of strangulated hernia in 1750.[1] First laparoscopic lumbar hernia repair was done by Burick and Parascandola in 1996.[2] Hafner et al stated that general surgeons will get only one opportunity to repair a lumbar hernia during their lifetime due. However, due to

the increased incidence of traumatic etiology and the advances in diagnostic methods available, lumbar hernias are encountered more frequently in current practice.[3] There are two triangles in lumbar region from which lumbar hernias can occur:

Superior lumbar hernia

Grynfelt 'Lesshaft triangle is an inverted triangular area with base by 12th rib and lower edged serrated posterior inferior muscle, anterior border by internal oblique muscle, posterior border by sacrospinous muscle, roof is formed by external oblique and floor is formed by transverse fascia. Hernia occurring from this triangle is known as superior lumbar hernia.

Inferior lumbar hernia

Petit triangle is smaller and its borders are made up as crest of iliac bone at base, external oblique muscle laterally and latissimus Dorsi muscle medially, floor is formed by lumbodorsal fascia.

The hernia occurring from weakness in this triangle is known as inferior lumbar hernia by Moreno-Egea et al.[1]

These hernias have a high propensity to have complications like obstruction and strangulations by Suarez et al.[27]

In our case, the swelling of lower lumbar strangulated hernia was first misdiagnosed as abscess in outside hospital. Lumbar hernia diagnosis was established after CT scan. This is consistent with view that CT scan is gold standard for better diagnosis and management of lumbar hernia by Moreno-Egea et al.[1]

Lumbar hernia can be operated by laparoscopic or open method. We decided to repair it with open method with midline laparotomy as the patient was dehydrated and was having intestinal obstruction with possibility of strangulation and need of resection anastomosis. We decided not to place a mesh because of infected cavity of hernia due to strangulated bowel. Patient did not have any recurrence or operative site complications even after 1 year of follow up.

CONCLUSION

Strangulated lumbar hernia is a rare entity and requires urgent intervention. CT scan can be helpful for early diagnosis of strangulated lumbar hernia. Midline laparotomy and primary closure of defect is a good option for emergency lumbar hernia repair with or without mesh.

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Ethical approval: Not required

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