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Urology

LAPAROSCOPIC REDO LUMBAR HERNIA REPAIR : A CASE REPORT

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ABSTRACT Lumbar hernias can be superior (Grynfelt) and inferior (Petit). Inferior lumbar hernias are extremely rare and, therefore, are associated with diagnostic difficulty. We present a case of a 65 year gentleman who had undergone open lumbar hernia surgery with meshplasty. The mesh got infected and explant of the mesh was done in outside hospital. He then underwent laparoscopic repair of lumbar hernia. Lumbar hernias can be primary acquired (55%), secondary acquired (25%) or congenital (20%). Cross-sectional imaging by CT or MRI appears to be the gold standard in diagnosis as ultrasound may lead to misdiagnosis. Strangulation, incarceration and obstruction are recognised complications, requiring prompt surgical intervention. There are currently no guidelines for surgical managements, although laparoscopic surgery may give the best results. In view of the scarcity of published cases, we aim to add to the literature to raise the index of suspicion and to promote prompt surgical management of lumbar hernias.

KEYWORDS : Hernia, Lumbar hernia, Prosthetic mesh repair, Misdiagnosis

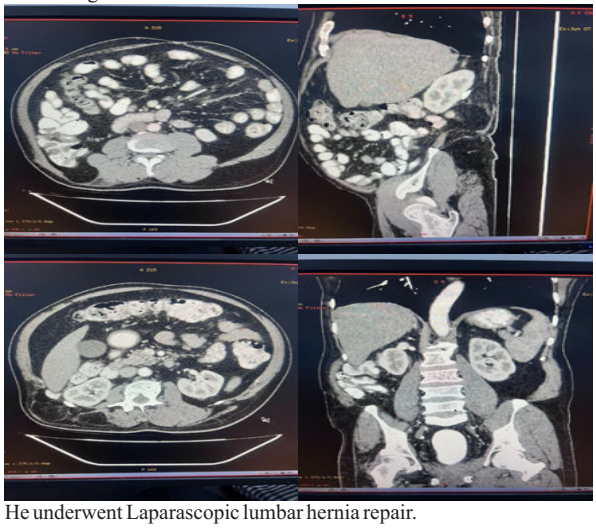
INTRODUCTION

Lumbar hernias are a protrusion of intra-abdominal contents through a weakness or rupture in the posterior abdominal wall. They are considered to be a rare entity with approximately 300 cases reported in the literature since it was first described by Barbette in 1672. Petit described the inferior lumbar triangle in 1783 and Grynfeltt described the superior lumbar triangle in 1866; both are anatomical boundaries where 95 % of lumbar hernias occur, whereas the other 5 % are considered to be diffuse. Twenty percent of lumbar hernias are congenital and the other 80 % are acquired; the acquired lumbar hernias can be further classified into either primary (spontaneous) or secondary. The typical presentation of lumbar hernias is a patient with a protruding semispherical bulge in the back with a slow growth. However, they may present with an incarcerated or strangulated bowel, so it is recommended that all lumbar hernias must be repaired as soon as they are diagnosed. The "gold standard" for diagnosing a lumbar hernia is a CT scan, because it is able to delineate muscular and fascial layers, detect a defect in one or more of these layers, evaluate the presence of herniated contents, differentiate muscle atrophy from a real hernia, and serve as a useful tool in the differential diagnosis, such as tumors. Recent studies have demonstrated the advantages of a laparoscopic repair instead of the classic open approach as the ideal treatment option for lumbar hernias.

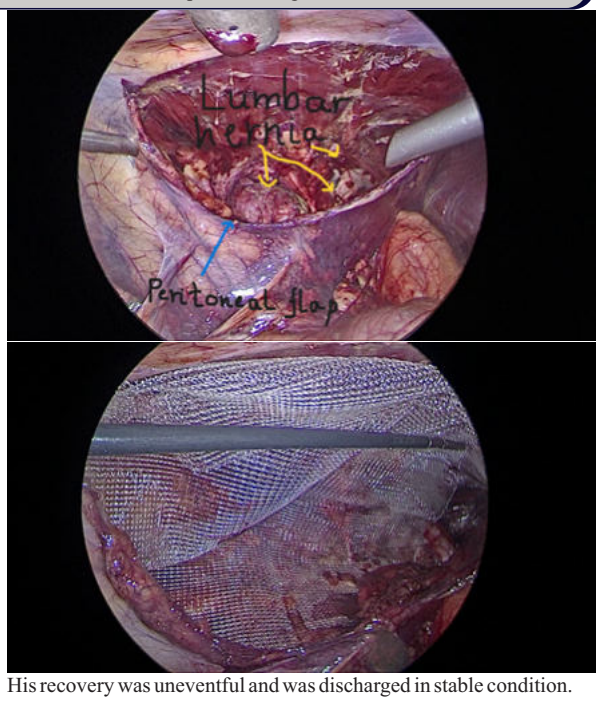
Case History

A 65 year old gentleman presented to us with pain and swelling in abdomen since 1 week.

He had undergone an open lumbar hernia repair with meshplasty. The mesh got infected and explant of the mesh was done in outside hospital. Pt was examined and investigated. Contrast enhanced CT scan was done. Images of the same are as shown



He underwent Laparascopic lumbar hernia repair.



His recovery was uneventful and was discharged in stable condition.

DISCUSSION

The lumbar triangle is defined as the space between the iliac crest (inferiorly), erector spinae (medially), 12th rib (superiorly) and external oblique (laterally). Within this triangle are two distinct triangles, the superior and inferior lumbar triangles.[1]

The posterior abdominal wall and the borders of the superior and inferior lumbar triangles.

Protrusion of extraperitoneal fat or intraperitoneal contents through either of the two triangles constitutes a lumbar hernia. Protrusion through the aponeurosis of the internal abdominal oblique constitutes an inferior lumbar, or Petit, hernia.[2] The clinical manifestation of this herniation is extremely rare and inferior lumbar herniation is rarer still.[3] This is thought to be due to the deeper position of the superior triangle and its larger surface area. Such hernias are more common in men aged 50–70 years and are usually unilateral. Some 55% of cases are primarily acquired (atraumatic), 25% are secondarily acquired, precipitated by injury or surgery and 20% are congenital.[4,5] Prompt treatment of lumbar hernias is essential, as 25% will progress to become incarcerated and 8% will be strangulated and may contain bowel susceptible to perforation.[6,7]

Bowel obstruction is a recognised complication of lumbar hernias as

9% obstruct, although less than 10% of patients presenting with lumbar hernia present as an emergency.[8] The challenge in diagnosis stems from a lack of awareness and scarcity of cases.[3]There is a large range of differential diagnoses for a loin lump, which include haematomas, fibromas, sarcomas, abscesses and renal masses. The most published misdiagnosis, however, is a lipoma. There are documented cases of lipoma extraction by surgery followed by a consistent mass being explained as a lumbar hernia.

Superficial imaging techniques such as ultrasound do not adequately demonstrate the contents of the lump and their relation with the abdominal wall.[8] A high index of suspicion must be taught when examining masses in the lumbar region, as good clinical examination should rule out most differentials and cross-sectional imaging (magnetic resonance or computed tomography) is the gold standard in diagnosis and enables the surgeon to plan their approach.

CONCLUSION

Lumbar hernia is a rare abdominal wall defect, which is usually secondary to trauma or previous surgery. A thorough history and clinical examination, along with abdominal CT, will provide accurate confirmation of the diagnosis. CT should always be included in the investigation prior to surgery, even in uncomplicated cases. The relevant literature is limited, but confirms that laparoscopic repair with mesh is the treatment of choice, especially when the hernia is symptomatic.

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