

Grynfelt-lesgaft lumbar hernia- laparoscopic repair and follow-up after one year: case report

Abstract

Lumbar hernia is an uncommon pathology, representing less than 2% of abdominal wall hernias. It can generally be confused with other entities and despite adequate physical examination, it is difficult to suspect its presence. Surgical treatment is the reference standard; however, there is no established evidence in the literature regarding the best approach. Still, the minor trauma and faster clinical recovery make the laparoscopic approach preferable. This publication aims to describe the clinical case of a male patient with chronic low back pain in whom a lumbar hernia is documented, after which a surgical correction is indicated by a minimally invasive approach.

Keywords: abdominal hernia, lumbosacral region, general surgery, laparoscopy

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Introduction

Lumbar hernia is defined as the protrusion of intraperitoneal or retroperitoneal contents through a defect in the posterior abdominal wall. These defects account for 1-2% of all hernias. Up to 25% of these patients may present with incarceration as their first manifestation, and less than 9% with strangulation. There are currently approximately 300 cases described in the literature, none of which follow the patient's post-operative evolution.

The first series of cases was described by Macready in 1890, and there are currently approximately 300 cases reported in the literature, most of which are of congenital origin. This condition is usually associated with unexplained low back pain and the presence of a soft mass that is usually evident during physical examination. The hernia can be painful and is often mistaken for a lipoma, which leads most patients to undergo imaging tests in which the defect in the posterior abdominal wall is evident. Surgical treatment of these hernias can be carried out through an open approach with a lumbar incision or through a laparoscopic approach using a totally extraperitoneal technique. According to Moreno-Egea et al, the latter technique has a lower rate of recurrence and chronic pain.¹

The aim of this article is to describe the clinical case of a patient with a reducible mass in the upper lumbar triangle, symptomatic, who underwent minimally invasive surgery and its subsequent evolution over a period of one year, certainly requiring an abdominal MRI study to determine the existing pathology and one-year post-operative control. Presence of failure of continuity in the muscular layer of the abdominal wall of the right flank with projection of mesenteric fat. The appearance is compatible with an upper lumbar hernia (Grynfeltt-Lesgaft hernia).

Case report

A 66-year-old male patient, attending the general practitioner's clinic due to clinical symptoms that had been going on for eight months following weight loss of approximately 15 kg, reported low back pain, predominantly on the left side, which had been exacerbated in the last few weeks prior to the consultation; no history of trauma

or surgical interventions. Due to this condition, the patient was referred to the general surgery department of a third-level hospital. During the physical examination, palpation revealed the presence of a soft, reducible mass, with no signs of incarceration, palpable during valsalva maneuvers, indicating a diagnosis of lumbar hernia, which is related to the symptoms reported by the patient.^{2,3}

In the general surgery consultation, the patient presented with a bulge measuring approximately 7 x 5 cm in the left lumbar region immediately below the costal margin. The MRI report of the upper abdomen and pelvis shows a gap in the continuity of the muscular layer of the abdominal wall of the right flank measuring 75 x 49mm in the longest anteroposterior and cranio-caudal axes respectively. Through this defect there is a projection of mesenteric fat with no intestinal loops, compatible with an upper lumbar hernia (grynfeltt-lesgaft hernia) and the presence of a bilateral inguinal hernia with a more obvious fat projection on the left (Figure 1 & 2).

With these findings, the patient is diagnosed with a hernia of the superior triangle of Grynfelt and is taken for laparoscopic repair using the totally extraperitoneal technique. With the patient in the right lateral decubitus position, three trocars are positioned at midline level, one 10mm and two 5mm, entering the pre-peritoneal space. Within the intraoperative findings, a 6 x 5cm hernia defect is described, located inferiorly to the 12th costal arch, between the internal oblique muscle and the erector spinae (Figure 3). The hernia defect was closed with stitches made of non-absorbable material and a polypropylene mesh was subsequently installed, which was fixed with cardinal stitches using non-absorbable thread. The surgery was uneventful and there was minimal bleeding.

The patient was discharged on the second post-operative day, re-evaluated at the outpatient clinic 12 days after the operation, without mentioning any pain or signs of recurrence of the hernia, with operative wounds in a good state of healing and no signs of infection, wearing an abdominal brace, being monitored by the general surgery team and returning to the outpatient clinic every 3 months for further evaluations without any complaints or signs of recurrence (Figure 4). A control MRI scan was requested one year after surgery, showing no recurrence. Patient in good health, doing physical activity.⁴

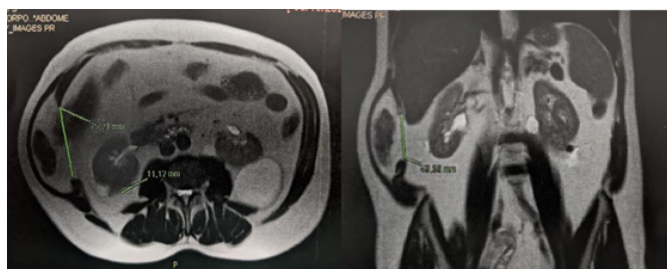


Figure 1 Magnetic Resonance Imaging.

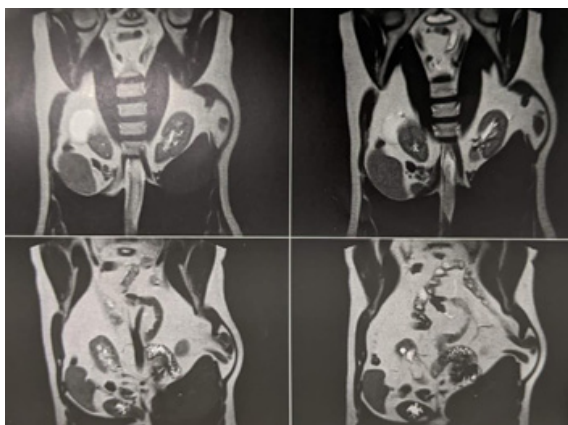


Figure 2 Magnetic Resonance Imaging.

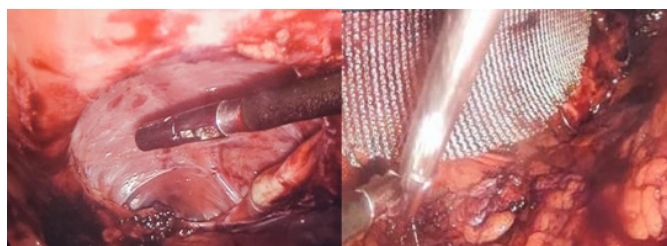


Figure 3 Herniated defect and repair with polypropylene mesh.



Figure 4 Post-operative return at 7 days and 1 month post-operatively.

Discussion

Grynfelt's hernia has a variable clinical presentation. Although the diagnosis is clinical, due to the number of cases described, confirmation with imaging tests is recommended, with tomography being the method of choice. The two therapeutic proposals described in the literature - laparoscopic or open approach - are accepted. However, the evidence of results is small considering the small number of cases. The use of polypropylene mesh is universally accepted. Recurrences after approach are described with a frequency of 5%, in the patient studied there were no signs of recurrence or complications after one year of follow-up.

Acknowledgments

None.

Conflicts of interest

The authors declare that there are no conflicts of interest.

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