

Lumbar Hernia Misdiagnosed As Lipoma: A Case Report

Vazralatha G¹, Thatha Rao V², Suryanarayana B³

¹ Vazralatha G, Post Graduate Student of General Surgery, NRI Medical College & General Hospital, Chinakakani, Guntur Dist, Andhra Pradesh, India.

² Thatha Rao.V, M.S., General Surgery, Professor & HOD of the Department Of General Surgery, NRI Medical College & General Hospital, Chinakakani, Guntur Dist, Andhra Pradesh, India.

³ Surya Narayana B, M.S., General Surgery, Professor, NRI Medical College & General Hospital, Chinakakani, Guntur Dist, Andhra Pradesh, India.

Abstract: Lumbar hernia is a rare abdominal wall defect and misdiagnosed as lipoma over back. It is included in ventral hernias despite being dorsolateral. Here we report a case of 70 year old female with complains of pain, swelling since two years. Clinical examination revealed 6x6 cm spherical swelling in the left lumbar region. Surface is smooth, Soft in consistency, margins well defined, not freely mobile, diagnosed as Lipoma. Intraoperatively, extra peritoneal fat protruding from a parietal defect of 3x3cms in the superior lumbar triangle seen and defect closed with prolene mesh. Post operative period of uneventful.

Key Words: Lumbar hernia, lipoma, parietal defect

I. Introduction

Lumbar hernia is a rare abdominal wall defect and misdiagnosed as lipoma over back. It is included in ventral hernias despite being dorsolateral, it mimics as incisional hernia from flank incisions. Lumbar hernias are rare defects involving two weak areas of the posterolateral abdominal wall: the superior lumbar triangle of Grynfeltt, which is the most common site, and the inferior lumbar triangle of Petit. In large congenital or postsurgical hernias the defect wall can affect the entire lumbar region. Lower-back pain is the most common symptom although small hernias may be asymptomatic except for a palpable mass. Misdiagnosis with lipoma is possible. Adequate surgical treatment depends largely on the type and size of the hernia and both open and laparoscopic techniques can be used with good results.

II. Observations

A 70 year-old woman presented with complains of pain, swelling since two years. No H/o of trauma, vomittings and fever. Clinical examination revealed 6x6 cm spherical swelling in the left lumbar region. Surface is smooth, soft in consistency, margins well defined, not freely mobile, puckering of the skin seen, no fluctuation, not reducible, no impulse on coughing General examination revealed. (Figure -1)



Figure -1

Moderately built, moderately nourished, No pallor, no icterus, no cyanosis no clubbing, no pedal edema, no lymphadenopathy. Vitals stable, Not a known of diabetic, hypertensive, asthma or CAD. Routine

blood investigations with in normal limits. An ultrasound examination confirmed the presence of a subcutaneous lipoma.

During the intervention, the aspect of the mass was clearly atypical of a lipoma and the suspicion of a lumbar hernia emerged (Figure 2). The herniated fatty mass was isolated and reduced in the abdomen. The abdominal wall defect was 6 x6 cm in diameter (Figure (Figure3), and was repaired using a mesh (Fig-4) and fixed with sutures to the muscles using a tension-free technique. The intervention was completed with the support of target controlled infusion with propofol.

Figure-2 : Herniated fatty mass



Figure 3 : Parietal defect

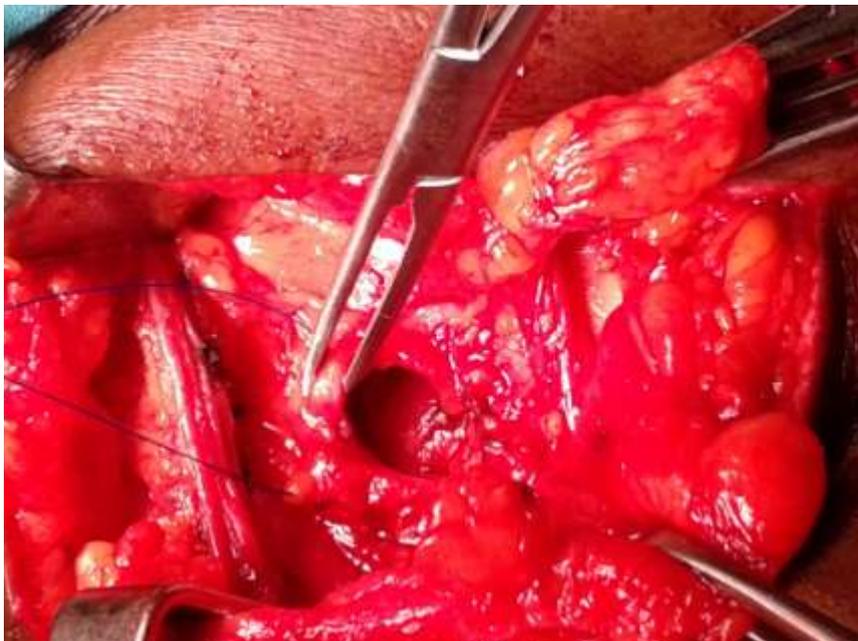


Figure -4 : Prolene mesh



Figure 5 : Post OP



III. Discussion

Lumbar hernia occur through defects in the lumbar muscles or the posterior fascia, below the 12th rib and above the iliac crest. Two types are described, according to superior lumbar hernia (Grynfeltt-Lesshaft hernia), inferior lumbar hernia (Petit hernia). Lumbar hernias may contain a number of intra or retro-peritoneal structures including: stomach, small or large bowel, mesentery, omentum, ovary, spleen, kidney. As with other hernia types, primary repair is the preferred method; however, especially with combined defects, the hernia can involve the entire lateral abdominal wall, and repair with prosthetic material is often necessary. Recurrence is rare and usually occurs in patients with other significant morbidities

Lumbar hernias are rare and a recent review reported approximately 300 cases¹ They are classified as congenital, generally associated with other malformations, or acquired, manifesting in adults spontaneously or secondary to trauma or surgical incision².

Lumbar hernia may occur in two weak areas of the posterolateral abdominal wall: the superior lumbar triangle of Grynfeltt, which is the more common site, and the inferior lumbar triangle of Petit. In large hernias the defect wall can affect all of the lumbar region^{3,4}.

Symptomatology frequently consists of only lower back pain. Small hernias may be asymptomatic except for a palpable mass. In less than 10% of cases, the onset is acute with bowel obstruction^{5,6}.

Anamnesis is helpful for diagnosis in post-traumatic or postsurgical lumbar hernias while in spontaneous adult hernias, misdiagnosis may occur^{1,7}.

Clinical suspicion is fundamental to guide imaging diagnosis because extraperitoneal fat herniated through a wall defect may mimic a lipoma. Computed tomography (CT) or magnetic resonance imaging (MRI) in patients with a suspected hernia can confirm the diagnosis adding information on parietal defect size, hernia content and muscular trophism⁸.

Adequate surgical treatment depends largely on the type and size of the hernia. A single surgeon cannot gain great experience in this pathology but knowledge gained in treatment of other abdominal wall hernias helps in proper planning of surgery. Both open and laparoscopic techniques can be used with good results⁹.

In small defects as present in our patient, the anterior approach is easy and effective; we used prolene mesh that provides stability positioned through the fascial defect in the preperitoneal space, and the body and rim can be sutured to muscles. Anterior repair is appropriate for repairing recurrent or large defects with a double mesh or a gluteus aponeurosis flap¹⁰. Laparoscopic repair has been used successfully in different reports with less pain, shortened hospital stay and good cosmetic and functional results¹¹⁻¹³.

IV. Conclusion

Lumbar hernias are congenital and acquired lumbar hernias. Acquired types are associated with back or flank trauma renal surgeries and bone grafts harvested from the iliac crest. Strangulation is rare in lumbar hernia. They must be differentiated from lipoma and cold abscess. Lumbar hernias can be approached by open or laparoscopic surgery. Knowledge of these rare hernia may be useful in diagnosis. Pre operative ultrasound will rule out the diagnosis. Appropriate surgical treatment should be planned on the basis of etiology and hernia size.

Bibliography

- [1]. Moreno Egea A, Baena EG. Controversies in the current management of lumbar hernias. *Arch Surg.* 2007;142:82–88. doi: 10.1001/archsurg.142.1.82.
- [2]. Le Neel JC, Sartre JY, Borde L, Guiberteau B, Bourseau JC. Lumbar hernias in adults. Apropos of 4 cases and review of the literature. *J Chir (Paris)* 1993;130(10):397–402.
- [3]. Loukas M, El-Zammar D, Shoja MM, Tubbs RS, Zhan L, Protyniak B, Krutoshinskaya Y. The clinical anatomy of the triangle of Grynfeltt. *Hernia.* 2008;12(3):227–231. doi: 10.1007/s10029-008-0354-4.
- [4]. Zhou X, Nve JO, Chen G. Lumbar hernia; Clinical analysis of 11 cases. *Hernia.* 2004;8:260–263. doi: 10.1007/s10029-004-0230-9.
- [5]. Astracioglu H, Sokmen S, Atila K, Karademir S. Incarcerated inferior lumbar (Petit's) hernia. *Hernia.* 2003;7:158–160. doi: 10.1007/s10029-003-0128-y.
- [6]. Losanoff EJ, Kjossev KT. Diagnosis and treatment of primary incarcerated lumbar hernia. *Eur J Surg.* 2002;168:193–195. doi: 10.1080/110241502320127829.
- [7]. Walsh M, Springfield DS. Spontaneous lumbar hernia. *JBJS.* 2004;86:1525–1527.
- [8]. Killen KL, Girard S, DeMeo JH. Using CT to diagnose traumatic lumbar hernia. *AJR.* 2000;174:1413–1415.
- [9]. Cavallaro G, Sadighi A, Miceli M, Burza A, Carbone G, Cavallaro A. Primary lumbar hernia repair: the open approach. *Eur Surg Res.* 2007;39(2):88–92. doi: 10.1159/000099155.
- [10]. Di Carlo I, Toro A, Sparatore F, Corsale G. Lumbar hernia repair using a new technique. *Am Surg.* 2007;73:54–57.
- [11]. Moreno Egea A, Torralba JA, Morales G. Open versus laparoscopic of secondary lumbar hernias: a prospective non randomized trial. *Surg Endosc.* 2005;19:184–187. doi: 10.1007/s00464-004-9067-7.
- [12]. Moreno Egea A, Guzman P, Girela E, Corral M, Aguayo Albasini GL. Laparoscopic hernioplasty in secondary lumbar hernias. *J Laparoendosc Adv Surg Tech A.* 2006;16(6):572–576. doi: 10.1089/lap.2006.16.572.
- [13]. Madan AK, Ternovist CA, Speck KE, Pritchard FE, Thichansky DS. Laparoscopic lumbar hernia repair. *Am Surg.* 2006;72(4):318–321.