Case Report

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Lumbar Hernia: A Case Report and Review of Literature

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Abstract

Lumbar hernias are among the rare hernias. They need high clinical suspicion as their signs and symptoms are usually non-specific. Patients are usually 50-70 years old. They commonly affect males and frequent on the left side. Here, we describe a 61 years male patient presented with left side primary inferior lumbar hernia which was supported by magnetic resonance imaging of abdomen and pelvis. They should be repaired as soon as possible to avoid complication. Here, he was undergone laparoscopic surgery with mesh hernioplasty. He resumed his routine activities within 2 weeks. After 1 year follow-up, he is alright without any symptoms or signs of recurrence.

Key words: Hernioplasty, Lumbar hernia, Laparoscopy

INTRODUCTION

Lumbar hernia is a rare entity with only fewer than 310 cases reported so far in the world.[1,2] It account for <1.5% of all abdominal hernias. Congenital hernias are usually small in size at the time of presentation; most commonly occur through the inferior lumbar triangle. Usually, clinical diagnosis is difficult due to non-specific symptoms.[3] They are prone to incarceration and strangulation, so surgery is advisable as soon as possible.[4,5] Primary acquired variety occur spontaneously, whereas secondary acquired variety occurs due to trauma, infection, or surgical incisions.[6] Surgical methods should be planned on the basis of etiology and hernia size.[7]

CASE REPORT

A 61 years male presented with pain and swelling in the left lumbar region since 6 months. He was a known case of hypertension under medication. All systemic examination are within normal limits. On examination, a single oval swelling of size 6 cm × 4 cm arising from the left inferior lumbar triangle found, which impulse on coughing, non-tender and reduces with a gurgle, on auscultation bowel sound heard. Abdominal muscle tone was good, and other hernial orifices were normal. Ultrasonography revealed a breach in peritoneum at the left lumbar region of size 5.3 cm × 3.4 cm with herniation of omental fat. Magnetic resonance imaging showed a wide neck left side inferior lumbar hernia containing descending colon and extraperitoneal fat (Figure 1). After controlling

Figure 1: Magnetic resonance imaging showing left side inferior lumbar hernia containing descending colon and extraperitoneal fat

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hypertension, the patient was posted for laparoscopy pre-peritoneal onlay mesh hernioplasty with prolene mesh (Figure 2). With the patient positioned in a 45° left semi-lateral position, the peritoneum is incised above the hernia (Figure 3) and dissected back to expose the muscle defect (Figure 4). The contents are reduced and a prolene mesh fixed to the 12th rib superiorly, iliac crest inferiorly, erector spinae fascia medially, and external oblique fascia laterally (Figure 5). Splenic flexure of the colon and retro-peritoneal fat were the content. The peritoneum then resutured to cover the mesh. His post-operative recovery was uneventful. He discharged on the 3rd post-operative day and resumed his routine activities within 2 weeks. After 1 year of follow-up, he is alright without any symptoms or signs of recurrence.

DISCUSSION

Barbette, in 1672, first suggested the existence of a lumbar hernia.[8] Garangeot reported the first incarcerated lumbar hernia in 1731. Grynfeltt and Lesshaft independently described superior lumbar hernias in 1866 and 1870, respectively.[9,10] Jean-Louis Petit first described inferior lumbar triangle in 1738.[11] Lumbar hernia is one of the rare hernias, so most surgeons are not exposed to. Hence, delayed diagnosis and delay in treatment, causing increased complication and increased morbidity.[3] It occurs more common in males (3:1) and is more frequent on the left side than the right (2:1).[12] They are classified into congenital (20%) and acquired (80%). Again acquired variety is divided into primary or secondary. Primary acquired hernias occur spontaneously and being the most common (55%). Secondary acquired hernias constitute about 25% of all lumbar hernias.[13] Like other hernias, they gradually increase in size. They are prone to incarceration and strangulation, so surgery is advisable as soon as possible.[4,5] Herniorrhapy is difficult, so hernioplasty is recommended. As for every hernia, it is important to create a tension-free mesh repair.

Most primary lumbar hernias occur through the inferior lumbar triangle of petit and less commonly through the

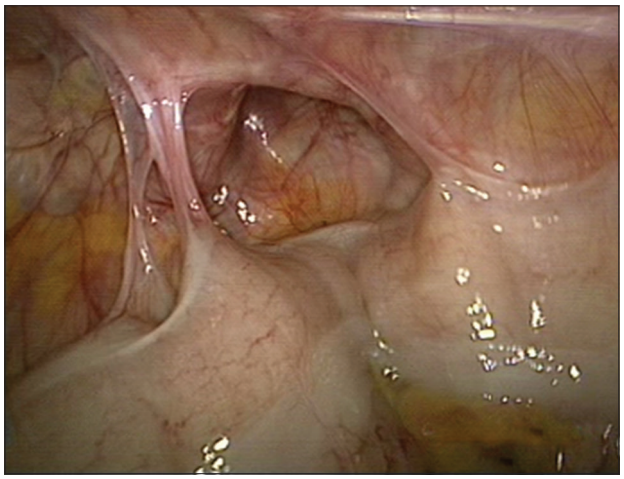

Figure 2: Trans-abdominal laparoscopic view showing the hernia defect and adhered descending colon

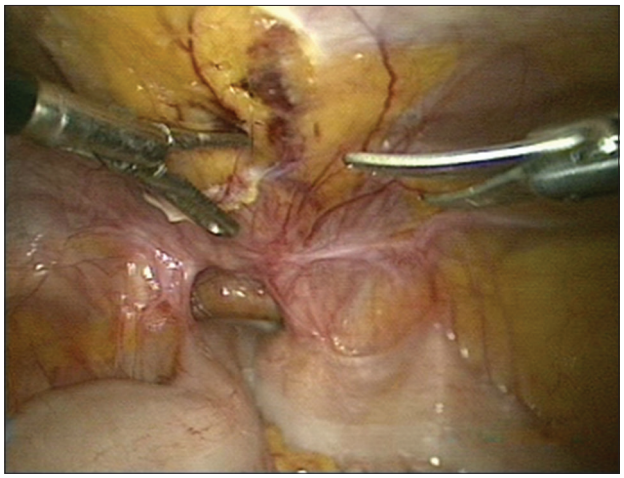

Figure 3: Incision of peritoneum above the hernia defect

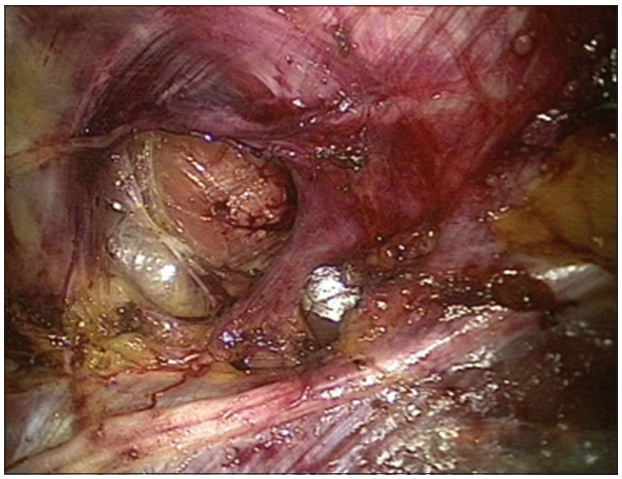

Figure 4: Exposed muscle defect after completion of the dissection

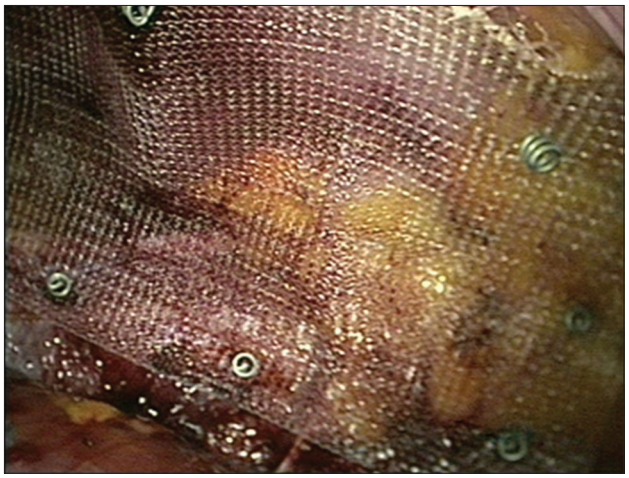

Figure 5: Tension-free prolene mesh placement over the defect

superior lumbar triangle of Grynfeltt.[8] A lumbar hernia must be distinguished from a lipoma, a cold abscess pointing to this position and pseudo-hernia due to local muscular paralysis.

Burick and Parascandola first introduced the trans-abdominal laparoscopic approach for lumbar hernia repair.[14] Laparoscopic repair has the advantage of less pain, shortened hospital stay, good cosmetic, and functional results.[15] For recurrent or large defects (especially if there is a component of neuropathic muscle atrophy present), anterior repair approach is preferable as a double mesh or a gluteus aponeurosis flap are needed.[16,17] Other methods can be used, e.g., mesh plug or retroperitoneoscopic tension-free mesh repair.[18-20] Post surgery seroma formation is common but resolves spontaneously, hardly need an aspiration of the fluid.

CONCLUSION

The choice of surgical procedure for the lumbar hernia should be individualized according to the etiology and size of the defect. And whenever possible, laparoscopic hernia repair should be taken priority over open procedures.

REFERENCES

1. Moreno-Egea A, Baena EG, Calle MC, Martínez JA, Albasini JL. Controversies in the current management of lumbar hernias. Arch Surg 2007;142:82-8.
2. Thorek M. Lumbar hernia. J Int Coll Surg 1950;14:367-93.
3. Ahmed ST, Ranjan R, Saha SB, Singh B. Lumbar hernia: A diagnostic dilemma. BMJ Case Rep 2014;2014. pii: Bcr2013202085.
4. Russel RC, Norman S, editors. Bailey & Love's Short Practice of Surgery. 24th ed. London: Edward Arnold; 2004. p. 1287.
5. Sharma P. Lumbar hernia. Med J Armed Forces India 2009;65:178-9.
6. Barden BE, Maull KI. Traumatic lumbar hernia. South Med J 2000;93:1067-9.
7. Mismar A, Al-Ardah M, Albsoul N, Younes N. Underlay mesh repair for spontaneous lumbar hernia. Int J Surg Case Rep 2013;4:534-6.
8. Stamatiou D, Skandalakis JE, Skandalakis LJ, Mirilas P. Lumbar hernia: Surgical anatomy, embryology, and technique of repair. Am Surg 2009;75:202-7.
9. Grynfeltt J. La hernie lombaire. Montp Med 1866;16:329.
10. Lesshaft P. Die lumbalgegend in. Anat. Chirurgischer. Arch Anat Physiol Wissensch Med Leip 1870;37:264.
11. Petit JL. Traite des Maladies Chirurgicales, et des operations qui leur conviennet. Vol. II. Paris: P Mequignon; 1738. p. 257.
12. Heniford BT, Iannitti DA, Gagner M. Laparoscopic inferior and superior lumbar hernia repair. Arch Surg 1997;132:1141-4.
13. Hacking C, Gaillard F, *et al*. Lumbar hernia: Radiopaedia. Available from: http://www.org/articles/lumbar-hernia. [Last accessed on 2015 Aug 23].
14. Burick AJ, Parascandola SA. Laparoscopic repair of a traumatic lumbar hernia: A case report. J Laparoendosc Surg 1996;6:259-62.
15. Arca MJ, Heniford BT, Pokorny R, Wilson MA, Mayes J, Gagner M. Laparoscopic repair of lumbar hernias. J Am Coll Surg 1998;187:147-52.
16. Moreno-Egea A, Torralba-Martinez JA, Morales G, Fernández T, Girela E, Aguayo-Albasini JL. Open vs laparoscopic repair of secondary lumbar hernias: A prospective nonrandomized study. Surg Endosc 2005;19:184-7.
17. Varban O. Lumbar hernia after breast reconstruction. Int J Surg Case Rep 2013;4:869-71.
18. Habib E. Retroperitoneoscopic tension-free repair of lumbar hernia. Hernia 2003;7:150-2.
19. Postema RR, Bonjer HJ. Endoscopic extraperitoneal repair of a Grynfeltt hernia. Surg Endosc 2002;16:716.
20. Susmallian S, Gewurtz G, Ezri T, Charuzi I. Seroma after laparoscopic repair of hernia with PTFE patch: Is it really a complication? Hernia 2001;5:139-41.

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