



Bilateral Petit's Triangle Hernia

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Abstract

Lumbar triangle hernia that occurs through lumbar triangles is very rare type of hernia. Only about 300 cases have been reported till date. Bilateral Petit's triangle hernia find further rarity and the case under reference is probably the first ever reported case of Primary bilateral Petit's triangle hernia. The present case is of a 46 years old married, multigravida female who presented with 1 year duration of LBA and subsequently notice of swelling both sides of low back. FNAC revealed lipoma and on exploration it turned out to be rarest extra peritoneal bilateral Petit's triangle hernia, fat as contents.

Key Words

Inferior lumbar triangle, Hernia

Introduction

The qualification bounded above by the 12th rib, below by the Iliac crest, behind by the erector spinae muscle and in front by a vertical line drawn from tip of the 12th rib to Iliac crest contains two triangles i. e. Grynfeltt-Lesshafts or Superior Lumbar Triangle and Petit's or Inferior Lumbar Triangle. The inferior lumbar triangle is bounded by the posterior free margin of the external oblique muscle in front; latissimus dorsi behind and iliac crest below (1).

The aetiology of a lumbar hernia may be congenital (maldevelopment or malformation of musculoskeletal system) or acquired. The spontaneous acquired variety may represent either a delayed presentation of the congenital variety or may be due to weakening of the muscle layer and various straining factors (2).

In addition 25% of all lumbar hernias have traumatic aetiology (3). This may be post surgical especially after kidney operation (4), harvesting a bone graft from the iliac crest (5), or fashioning a latissimus dorsi flaps. Lumbar hernias may also follow blunt or penetrating injuries to the flanks in which case hernia may be large and not conform to the anatomical boundaries of the lumbar region (6). Most of the primary lumbar triangle hernias occur through the inferior lumbar triangle of Petit's. Till date about 300 odd cases of lumbar triangle hernia have been reported (3). Bilateral inferior lumbar

triangle hernia further finds scarcity in the literature. Author presents here a very rare and probably the first reported case of primary inferior lumbar triangle hernia / Petit's triangle hernia.

Case Report

Forty-six year old married, multigravida, thin build female presented in the surgical OPD with 1 year history of pain low back, dull aching to dragging / burning in nature at times moderate intensity. The patient noticed small swellings on either side of the lower back while getting oily massage from a quack about 9 months back. There was an increase in the size of the swelling. There was no associated history of surgery, trauma and fever / constipation / cough. On examination, there were two well-defined circumscribed swelling on either side of low back (lumbar triangle area) 5 cm by 2 cm on right side and 6 cm by 2.23 cm on left side without any cough impulse. They were non-reducible, firm consistency and non-tender swellings. The FNAC of swellings revealed features consistent with lipoma. With intent to excise the lipoma the author proceeded with surgery under local anaesthesia and it turned out to be bilateral inferior lumbar triangle hernia, extra peritoneal fat being the content. Simple repair of the defects with prolene was contemplated under local anaesthesia.

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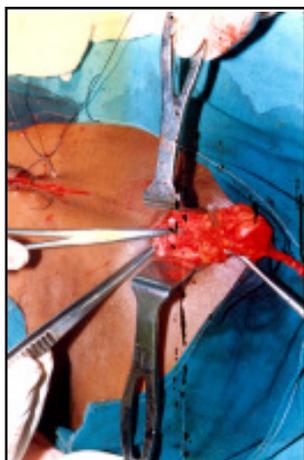


Fig. 1. Artery forceps indicating hernia defect in Petit's Triangle

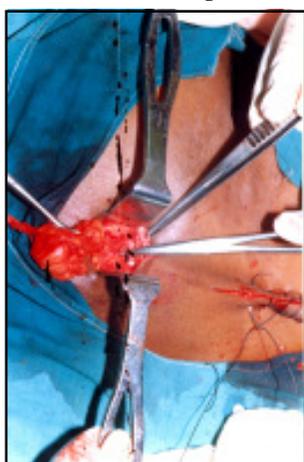


Fig. 2. Contralateral hernia dealt and skin sutures in progress

Discussion

Only about 300 cases of lumbar triangle hernia have been reported till date that shows the rarity of the condition (3,7,8). There is a possibility that because of asymptomatic or vague complains such as low backache (9), the diagnosis may further be missed or delayed in fatty patients or in post surgical patients in whom the classical presentation of a reducible flank swelling, which gives an expansile impulse on coughing is uncommon. In such a situation, a long standing hernia is apt to be mistaken for lipoma, fibroma, a retroperitoneal tumor or a chronic abscess (1). Our case presented with history of low backache ranging from dull aching to moderate intensity, dragging / burning sensation with two palpable swellings on either side of spine in the lower back. We proceeded with provisional diagnosis of lipoma as preoperative FNAC also revealed the same. Although

so may investigation like barium study, IVU etc. have been recommended with an intent to find out which part of the bowel makes contents of the hernia but lately CT scan has been considered as one investigation that distinguishes muscular and fascial layers. In addition it differentiates between hematoma / abscess / soft tissue tumors (9-10). Ultrasound has also been proved useful in imaging a lumbar hernia (11). A lumbar hernia should be repaired surgically as it is prone to both obstruction and strangulation (12). Laparoscopic transabdominal preperitoneal mesh repair for lumbar hernia confers all the benefits of minimal access surgery to the patient and follows current principles of tensionless repair of ventral abdominal hernia (13). We repaired the defect with prolene on both side. Patient remained in follow up clinic for about one year. Patient was symptoms free and without any evidence of recurrence.

Conclusion

Congenital, spontaneous as well as posttraumatic herniation through lumbar triangles is a very rare entity which can be confused with various conditions hence diagnosis requiring an appropriate index of suspicion and timely surgical treatment is highly warranted.

References

1. Sarela AL, Mavanur AA, Bhaskar A *et al.* Post traumatic lumbar hernia. *J Postgrad Med* 1996 ; 42 : 78-80.
2. Ponka JL. Lumbar hernia. In : Ponka JL. *Hernia of the abdominal wall.* Philadelphia : Saunders 1980 pp 465-77.
3. Swartz WT. Lumbar hernia. In : Nyhus LM, Condon RE, (editors). *Hernia*, 2nd ed. Philadelphia : Lippincott 1978 pp 409-26.
4. Ward JN, Lavengood RW, Subramaniam AP, Draper JW. Lumbar approach to the kidney : Complications associated with procedure. *Urology* 1974 ; 3 : 163-67.
5. Castelein RM, SAuter AJ. Lumbar hernias in an iliac bone graft defect. *Acta Orthop Scand* 1985 ; 56 : 273-74.
6. Quick CR. Traumatic lumbar hernias. *Br J Surg* 1982 ; 69 : 160.
7. Ramka SR, Bakshi G, Kamat M, Mohiet JD. Lumbar hernia. *Bomb Hosp J* 2000 ; 42(4) : 635-36.
8. Light HG. Hernia of the inferior lumbar space : A cause of back pain. *Arch Surg* 1983 ; 118 : 1077-80.
9. Faro SH, Racette CD, Lally JF. Traumatic lumbar hernia. CT diagnosis. *Am J Radiol* 1990 ; 154 : 757-59.
10. Baker ME, Weinerth JL, Andriani RT. Lumbar hernia : Diagnosis by CT scan. *Am J Radiol* 1987 ; 148 : 565-67.
11. Siffing PA, Forrest TS, Frick MP. Hernias of the inferior lumbar space : diagnosis with ultrasound. *Radiol* 1989 ; 170 : 190.
12. Hancock BJ, Wiseman NE. Incarcerated congenital lumbar hernia associated with lumbocostovertebral syndrome. *J Pediatr Surg* 1988 ; 23(8) : 782-83.
13. Sharma A, Panje R, Khullar R *et al.* Laparoscopic transabdominal extra peritoneal repair of lumbar hernia. *J Min Access Surg* 2005 ; 1 : 70-73.