International Surgery Journal
Meher D et al. Int Surg J. 2019 Sep;6(9):3424-3426
http://www.ijsurgery.com
pISSN 2349-3305 | eISSN 2349-2902

DOI: http://dx.doi.org/10.18203/2349-2902.isj20194098

Case Report

Obstructed lumbar hernia: an unusual encounter

Dibyasingh Meher*, Suvendu Sekhar Jena, Vishal Chopra, Argal Narottamsingh Baburam

Department of Surgery, Pt.B.D.Sharma PGIMS, Rohtak, Haryana, India

Received: 04 July 2019
Accepted: 12 August 2019

***Correspondence:**
Dr. Dibyasingh Meher,
E-mail: dibyasingh54@gmail.com

ABSTRACT

Spontaneous lumbar hernia is one of the few rarely encountered clinical entities. Only few hundred cases had been reported since it was first described by Barbette in 1672. Obstruction of lumbar hernia is even rarest among reported cases. 60 year female presented with features of obstructed lumbar hernia through inferior triangle of Petit. Onlay meshplasty was done after repair of the small defect. Though obstruction of lumbar hernia is rare, but can be presented as surgical emergency if not address early.

Keywords: Spontaneous lumbar hernia, Obstructed lumbar hernia, Triangle of Petit, Onlay meshplasty

INTRODUCTION

Around 300 cases of lumbar hernia is reported till now.[1]It was first described by Barbette in 1962.[2] It is often confused with lipoma presenting as flank swelling. But early diagnosis and treatment is warranted as 25% cases present as incarcerated and 8% as strangulated.[3] We present a case of obstructed lumbar hernia which required emergency laparotomy.

CASE REPORT

A 60 year old female presented with pain abdomen, multiple episode of bilious vomiting 2 hours after pain. Followed by these she developed non-passage of stool and flatus for 3 days. There was history of umbilical hernia 25 year back and vaginal hysterectomy 10 year back. On examination no lump was visible, but a non-reducible, tender lump of size 3×3 cms palpable in left flank. Bowel sound was raised. There was no other swelling present.

On abdominal radiograph there was dilated small bowel loop with multiple air fluid level (Figure 1). On CECT abdomen there was a small defect in left lumbar region with herniation of small portion of mid ileal loop in the intermuscular plane of abdominal wall and dilatation of jejunal and proximal jejunal and ileal loops (Figure 2). Ultrasonography with colour Doppler also confirm the computed tomography (CT) finding with normal flow (Figure 3).

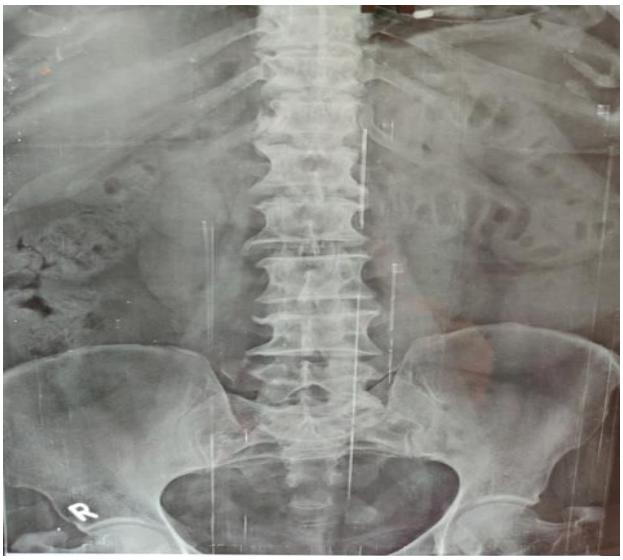

Figure 1: X-ray abdomen showing dilated bowel loop.

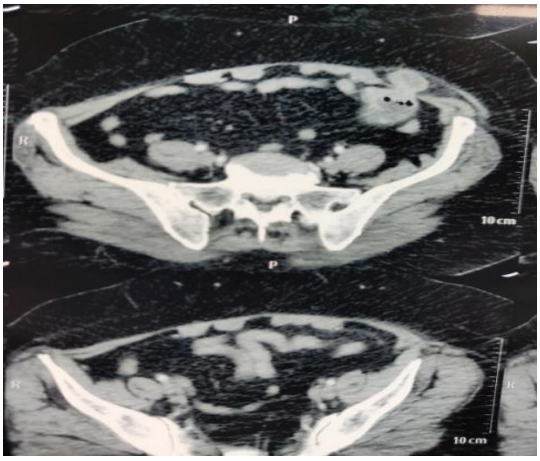

Figure 2: CECT Abdomen showing defect with herniation of small bowel loop.

Figure 3: Colour Doppler showing the viable gut content of hernial sac.

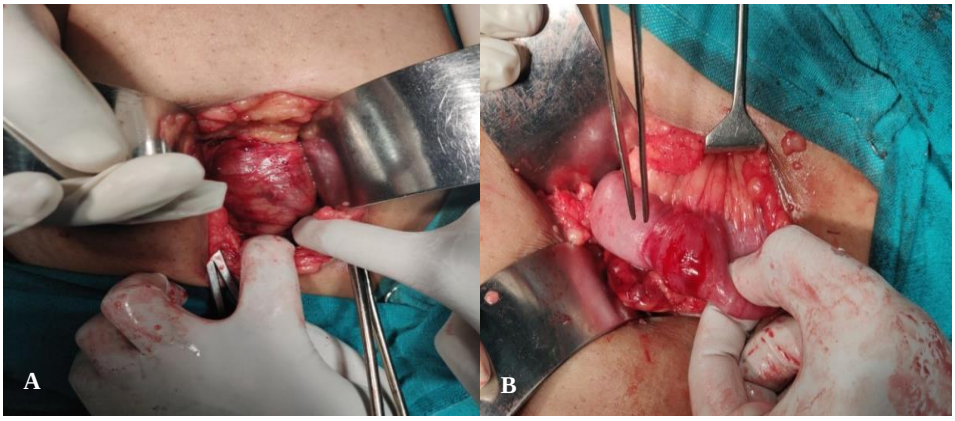

Figure 4 (A and B): Intraoperative images with healthy ileal loop as content of hernia.

On emergency laparotomy a defect of size 3×4 cms found in left lumbar region containing healthy ileal loop (Figure 4). Small bowel loop reduced into the cavity. The defect was repaired primarily and on lay meshplasty done. Post-operatively patient recovered well and discharged on 6th day. She is doing well on subsequent follow-up.

DISCUSSION

Lumbar region contain two anatomical triangle, superior triangle of Grynfeltt-Lesshaft and inferior triangle of Petit. Superior triangle is bounded by the 12th rib, posterior border of inferior oblique and erector spinae muscles. Hernia in more common in superior triangle which is larger than inferior triangle.[4] Inferior triangle bounded by external oblique muscle, the posterior border is the anterior extent of the latissimus dorsi muscle, and the inferior border is the iliac crest. The floor of the superior triangle is composed of transversalis fascia and the entire triangular space is covered posteriorly by the latissimus dorsi muscle.[5]

Lumbar hernia is classified in to congenital (20%) and acquired (80%) which is further classified as primary and secondary. Post-surgical and trauma comprises 25% case of secondary lumbar hernia.[6]

Patients can present with a protruding mass which can be symptomatic or asymptomatic. Symptomatic patients present with mild to severe pain which can be referred to anterior abdomen and also present with urinary obstruction or oliguria if renal content present within the sac. Signs and symptom of intestinal obstruction can be there if hernia is incarcerated or strangulated.[7]

By use of ultrasound and CT scan lumbar hernia diagnosis can be confirmed. CT scan is of more diagnostic value than ultrasound.[5] More information about muscle layer, number of defect and size with content can be obtained from CT.[6]

Open repair or laparoscopic repair can be done with use of prosthetic mesh. In emergency situation use of mesh is controversial.[8] Some writer do not recommend any mesh while some recommend use of mesh even if resection of bowel done with precaution to minimize complication.[8-10] In our case we used polypropelene mesh. Tissue repair with fascia lata and surrounding tissue can be done but there is high recurrence rate, because of tension.[11]

Depending upon the size of defect, mesh can be placed in onlay, inlay and underlay position. Laparoscopic repair can be done with extraperitoneal and transabdominal approach.

CONCLUSION

Though clinical presentation of lumbar hernia is rare, but it should be kept in mind while evaluating old age, obese patient presenting with obstruction and should be addressed as soon as possible.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Russell RC, Norman S. Bailey and Love's Short Practice of Surgery. 25th edition. London: Edward Arnold; 2007: 983.
2. Pachani AB, Reza A, Jadhav RV, Mathews S. A primary idiopathic superior lumbar triangle hernia with congenital right scoliosis: A rare clinical presentation and management. Int J Appl Basic Med Res. 2011;1(1):60–2.
3. Stamatiou D, Skandalakis JE, Skandalakis LJ, Mirilas P. Lumbar hernia: surgical anatomy, embryology, and technique of repair. Am Surg. 2009;75:202–7.
4. Shackelford's Surgery of the Alimentary Tract. 8th edition. Elsevier: Philadelphia; 2019: 606.
5. Zinner MJ, Ashley SW. Maingot's Abdominal Operations. 12th edition. United States: McGraw Hill Professional; 2012: 148–9.
6. Thorek M. Modern surgical technique. Philadelphia: J. B. Lippincott; 1950.
7. Shackelford's Surgery of the Alimentary Tract. 8th edition. Elsevier: Philadelphia; 2019: 607-608.
8. Sartelli M, Coccolini F, van Ramshorst GH, Campanelli G, Mandalà V, Ansaloni L. WSES guidelines for emergency repair of complicated abdominal wall hernias. World J Emerg Surg. 2013;8(1):50.
9. Makhmudovos. Spontaneous rupture of strangulated lumbar hernia. Khirurgiia (Mosk). 1955;2:67.
10. Carrelet T, Naim-Hindi H, Delmarre B. Strangulated lumbar hernia: a rare cause of intestinal occlusion. Presse Med. 1987;16(12):586-7.
11. Walgamage TB, Ramesh BS, Alsawafi Y. Case report and review of lumbar hernia. Int J Surg Case Rep. 2015;6:230–2.

Cite this article as: Meher D, Jena SS, Chopra V, Baburam AN. Obstructed lumbar hernia: an unusual encounter. Int Surg J 2019;6:3424-6.