International Journal of Research in Medical Sciences
Sharma VM et al. Int J Res Med Sci. 2013 Feb;1(1):33-35
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012
DOI: 10.5455/2320-6012.ijrms20130209

Case Report

A case of inferior lumbar hernia

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Received: 9 January 2013
Accepted: 10 February 2013

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ABSTRACT

In this article we report a case of inferior lumbar hernia. The patient underwent preperitoneal meshplasty. The patient is well on follow up with no recurrence. The relevant literature has been reviewed and management discussed in brief.

Keywords: Lumbar hernia, Preperitoneal, Meshplasty

INTRODUCTION

Inferior lumbar hernia is one of the rare hernias. It can occur individually or in association with certain syndromes or following trauma. We report a case of inferior lumbar hernia which was spontaneous and treated successfully at our institution.

CASE REPORT

A 56 year old lady presented to the surgical OPD with complains of swelling in right lumbar region associated with dull aching pain since 6 months. The swelling used to appear on coughing and disappear on compressing it. There was no history suggestive of irreducibility or obstruction. There was also no history of trauma, localized muscular paralysis or surgery done in past.

On examination there was a single oval swelling of 10 x 8 cms arising from the right inferior lumbar triangle with an expansile impulse on coughing. It was nontender and reducible on compression with a gurgle. The opposite side lumbar region and other hernial orifices were normal. The abdominal muscle tone was good.

Patient was thoroughly investigated. Patient was on treatment for hypertension for last two years and was under control. Anaesthetic fitness was taken.

Right lumbar preperitoneal meshplasty was planned. Omentum with large bowel was found herniating through inferior triangle of petit which was reduced. Defect was repaired with interrupted prolene stitches and preperitoneal mesh fixation with polypropylene mesh was done. The patient was well on follow up with no recurrence.

DISCUSSION

Lumbar hernia is a rare hernia which accounts for less than 1.5% of total hernia incidence. Only 200-300 cases have been reported in the literature. It herniates through superior/inferior lumbar triangle. Herniation through inferior triangle is more common, probably due to variable attachment of external oblique and latissimus dorsi to iliac crest. If they are closely attached then this triangle is not present and no hernia occurs.[1]

Anatomy

The inferior (Petit) triangle is smaller than the superior and is positioned apex cephalic. The inferior lumbar triangle is formed medially by the latissimus dorsi muscle, laterally by the external abdominal oblique muscle, inferiorly by the iliac crest. The floor of the inferior lumbar triangle is the internal abdominal oblique muscle.

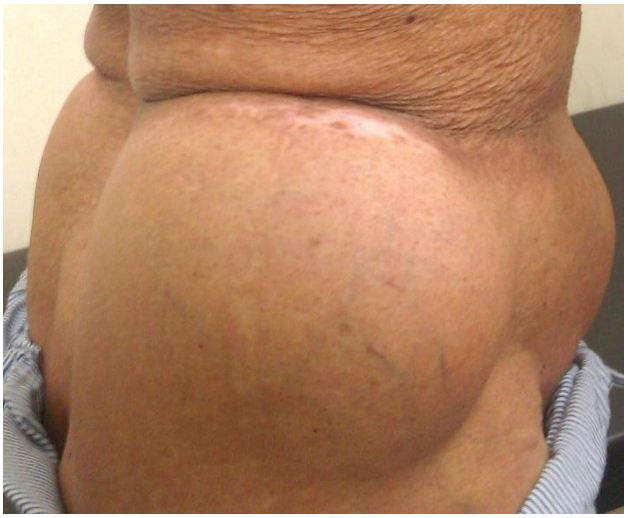

Figure 1: Right inferior lumbar hernia preoperative photo.

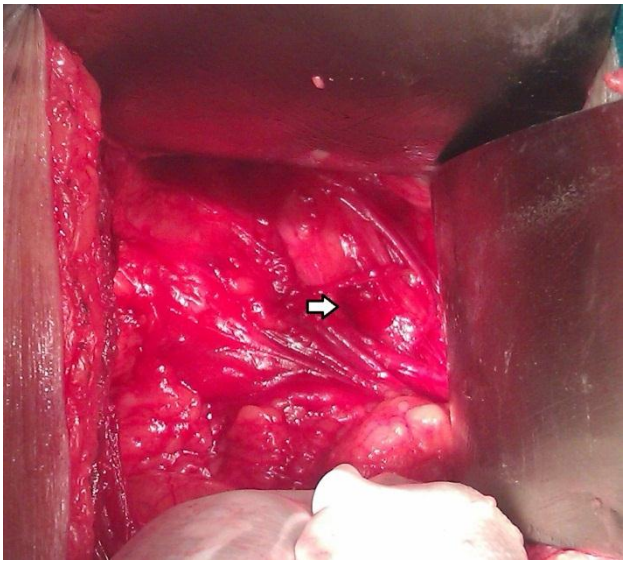

Figure 2: Intraoperative image showing right inferior lumbar hernia defect.

Aetiology

1. Congenital: Individually or associated with a) Other abdominal hernias[2] viz. epigastric, inguinal b) Lumbocostovertebral syndrome[3] a) Neurofibromatosis type 1.[4]
2. Acquired: Trauma, localised muscular paralysis (e.g. polio), post laparoscopic cholecystectomy.[5]

Lumbar hernia does not include hernia following an operation on kidney which is an incisional hernia.[6]

Presentations

1. Lump
2. Backache with pain radiating to groin due to irritation of lateral cutaneous branch of 10, 11, 12th intercostal nerves.

Complications

1. Irreducibility
2. Incarceration[7]
3. Strangulation

Investigations

Ultrasonography is usually decisive. Few cases may require CT scan.

Differential diagnosis

1. Lipoma
2. Cold abscess

Treatment

Before the era of meshplasty, Dowd repair[9] was practised. It involved closure of defect by a pedicle flap of tensor fascia lata and gluteus maximus from below the iliac crest with side to side opposition of external oblique and latisimus dorsi for petit triangle hernia. For superior triangle flaps from adjacent structures were developed.

Presently if the defect is small and good, strong tissue around, then defect can be closed with continuous polypropylene suture.

For large defect, poor muscular tissue, preperitoneal meshplasty is the preferred treatment. Lately in the laparoscopic era, lumbar hernias are repaired laparoscopicaly with prosthetic mesh.[10]

ACKNOWLEDGEMENTS

We are grateful to the superintendent Dr. S.M. Mukherjee and Dean Dr. Kirti Patel of GCS Medical College, Hospital and Research Centre for granting us permission to publish the case report.

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DOI: 10.5455/2320-6012.ijrms20130209
Cite this article as: Sharma VM, Akruwala SD, Desai S, Dave RI. A case of inferior lumbar hernia. Int J Res Med Sci 2013;1:33-5.