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# RETROPERITONEAL LIPOMAS PRESENTING AS INGUINAL HERNIA – A DIAGNOSTIC DILEMMA

General Surgery

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## ABSTRACT

**Introduction** - Retroperitoneal lipomas rarely present as inguinal hernia. The part of the tumour that herniates represents only the tip of the iceberg as the main part of herniated mass is not detected clinically. **Case discussion** - A 60-year-old male presented with complaints of pain over irreducible swelling in left inguinoscrotal region for 3 days which was present for 2 years. Lump was palpable of size ~20x10x7 cm with mild tenderness with ultrasonography suggestive of left inguinal hernia with 2.8 cm defect with bowel and omentum as content with sluggish peristalsis. Patient was posted for hernia repair through inguinal incision with intraoperative findings where sac could not be visualised with irreducible contents. Hence exploratory laparotomy was done and mass was found to originate from retroperitoneum of size ~ 30 x15x10 cm encasing left testes. Enbloc resection of the retroperitoneal lipoma with left orchidectomy done and sent for histopathology which was suggestive of Retroperitoneal Multilobular Lipoma. **Conclusion** - The presented case points out that abdominal lipomas can be misdiagnosed as irreducible inguinal hernia. Not all groin masses are simple hernias, and hernia cases have the potential to reflect distant disease processes.

## KEYWORDS

## INTRODUCTION:

Lipomas are benign tumour of mature adipocytes in subdermal region. It is commonly located in trunk and extremities but rarely retroperitoneally. The etiology of lipomas is not clear. Lately a positive adipocytes stem cell turnover has been supposed as the underlying mechanism. [1] Retroperitoneal lipomas are a rare condition and only 17 cases of retroperitoneal lipomas in adults have been described in the literature since 1980. [2] Deep lipomatous tumours may present with a herniating palpable mass either in the abdominal wall or in the groin. Due to their deep location, lipomatous tumours are often large at the time of presentation and therefore their surgical management is difficult and with late presentation there is a higher risk of differentiation. [3] The purpose of this case report is to describe how appropriate radiological workup of a patient is required as retroperitoneal lipomas may create as diagnostic dilemma of inguinal hernia.

## Case Report:

A 60-year-old gentleman presented with complaints of pain and swelling over left inguinoscrotal region for 3 days with history of irreducibility present. On enquiring patient gave history of swelling over left inguinoscrotal region for 2 years which gradually increased in size upto present extent of presentation.

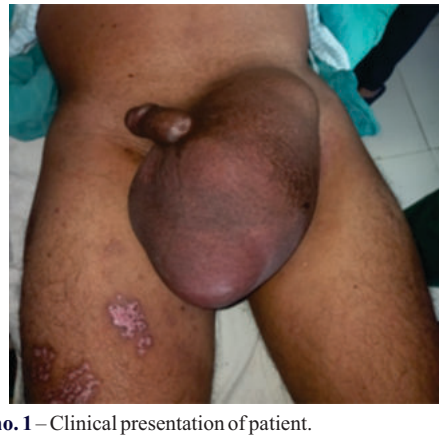

**Figure no. 1** – Clinical presentation of patient.

Swelling was slightly reducible in initial phases which becomes prominent on straining and reduced on lying down but swelling becomes irreducible with sensation of pain over it since 3 days. Patient was vitally normal with no history of any comorbidity. On systemic examination the abdomen was soft, mild tenderness in left side of abdomen with single swelling of size 20 x10 x 7 cm in left inguinoscrotal region which was firm in consistency and mild tender on palpation with no local warmth and redness and extending from left inguinal region till bottom of left scrotum with cough impulse negative deviation of penis to right side.

Ultrasonography ordered which was suggestive of herniation of bowel loops and omental fat with normal vascularity and sluggish to and fro peristalsis through a defect of size 2.8 cm noted in anterior abdominal wall at left inguinal region with involvement of left testes. Patient was taken for surgical repair of irreducible inguinal hernia and even after opening of inguinal canal, sac could not be visualised, and mass cannot be reduced inside the abdomen. intraoperative decision was taken for midline exploratory laparotomy as mass could not be traced and reduced despite extended inguinal crease incision. Midline laparotomy was carried out and giant mass of size measuring ~ 30 x 15 x 10 cm appears originating retroperitoneally.

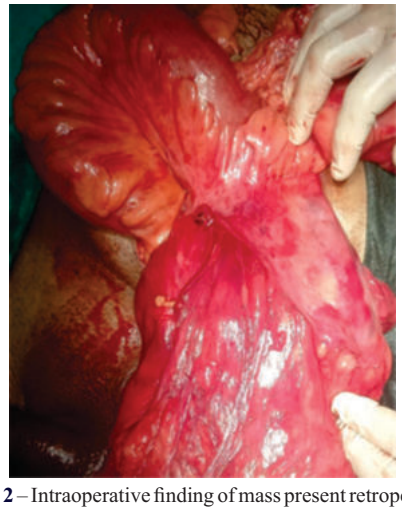

**Figure no. 2** – Intraoperative finding of mass present retroperitoneally.

Mass seen as large lobulated encapsulated adipose tissue of left retroperitoneal origin and Mass was seen encasing left testes also.

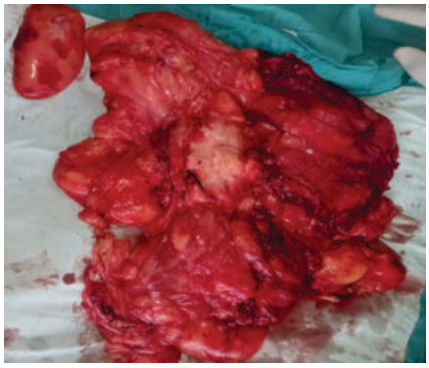

**Figure no.3** – EnBloc resection of retroperitoneal mass with left orchidectomy

Enbloc Resection of Herniated retroperitoneal mass done with wide margins with left orchidectomy and sent for histopathological examinations. Patients postoperative course was unremarkable with histopathological report of section showing large encapsulated tumour comprised of fat cells separated by thin fibrous septae containing blood vessels along with areas of fibro collagenous tissues with no atypia suggestive of MULTILOBULAR RETROPERITONEAL LIPOMA.

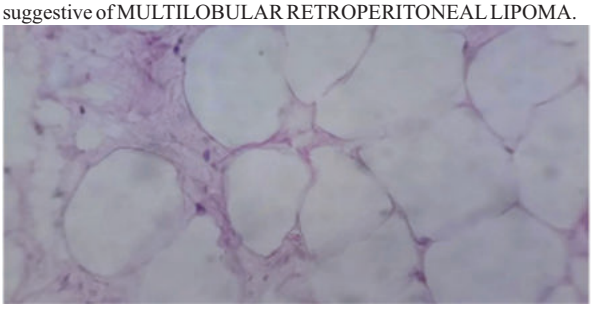

**Figure no. 4** – Histopathological section

Patient was postoperatively stable, and he was discharged on postoperative day 15 after removal of all sutures and with reports. Now one year after his initial diagnosis, this gentleman continues to be monitored for local and distant recurrence of disease but patient stable with no history any recurrence

## DISCUSSION:

Hernia is a very common problem with most common presentation as inguinal hernia and about 80 % with bowel and omentum as common contents. [4] Inguinal hernia is a common cause of a bulge in the groin and the differential diagnosis for hernia sac contents extends beyond fat and bowel.

While in lipomas only 17 cases of Giant Retroperitoneal Lipomas in Adults have been reported in the literature since 1980.[5] Contrary to retroperitoneal lipomas, subcutaneous lipomas are linked to hypercholesterolemia, obesity and trauma. Additionally, none of these aspects were described as favourable for the patient. Before they generate abdominal swelling or discomfort as a result of obstruction or movement of nearby organs and tissues, retroperitoneal lipomas typically go for a long period without any symptoms. They may already be huge in size at this stage. This could be attributed to their slow growth and the huge retroperitoneal space that allows them to expand before they become symptomatic. Magnetic resonance imaging or Ct scan can be used to make the diagnosis.[6]

With various radiological modalities, ultrasound is the first choice in the evaluation of a groin mass due to cost, safety, availability and high sensitivity and specificity.[1] This patient groin mass was initially evaluated by USG which was suggestive of bowel and omentum containing hernia with sluggish to and fro peristaltic movement and normal vascularity of bowel with history of pain and irreducibility in recent days.

Patient underwent exploration with surgical repair of hernia, but it could not be possible as sac was not visualised with mass being irreducible and encasing left testes. Intraoperative decision was done for midline exploratory laparotomy with intraoperative findings of large left retroperitoneal lipomatous mass extending into scrotum and encasing left testes. Hence En Bloc Resection of mass done with left orchidectomy.

In Retrospect, Giant retroperitoneal lipoma was not detected in initial USG as mass was fatty and indistinguishable from normal adipose tissue. It was irreducible and non-mobile which would make it difficult to detect on Valsalva as opposed to mobile fat containing inguinal hernia. Hence enbloc resection done and postoperatively histopathological findings were suggestive of mass as Multilobular Retroperitoneal Lipoma.

## CONCLUSION:

Retroperitoneal lipomas are rare condition with extremely rare presentation as Inguinal hernia. Not all groin masses are simple hernia as hernia cases have the potential to reflect distant disease process.

This case demonstrates,

a) The importance of thorough clinical examination
b) Large abdominal lipomas can be misdiagnosed as Inguinal hernia, thus detailed investigations required preoperatively such as CT / MRI on routine or emergency basis.
- EnBloc resection of mass is surgical treatment of choice.

**Disclosure:** No portion of the manuscript, including images, contains patient-identifiable information.

**Conflict of Interests:** The authors declare that there is no conflict of interests regarding the publication of this paper.

## REFERENCES:


1. McKinley SK, Abreu N, Patalas E, Chang A. Large Retroperitoneal Liposarcoma Diagnosed upon Radiological Evaluation of Mild Right-Sided Inguinal Hernia. Case Rep Radiol. 2013; 2013:187957.
2. Martinez CA, Palma RT, Waisberg J. Giant retroperitoneal lipoma: a case report. Arq Gastroenterol. 2003 Oct-Dec;40(4):251-5.
3. van Langevelde K, Azzopardi C, Kiernan G, Gibbons M, Orosz Z, Teh J. The tip of the iceberg: lipomatous tumours presenting as abdominal or pelvic wall hernias. Insights Imaging. 2019 Jul 5;10(1):66.
4. Oberg S, Andresen K, Rosenberg J. Etiology of inguinal hernias: a comprehensive review. Frontiers in Surgery. 2017; 4:52.
5. Weniger M, D'Haese JG, Kunz W, Pratschke S, Guba M, Werner J, et al. En-bloc resection of a giant retroperitoneal lipoma: a case report and review of the literature. BMC Research Notes. 2015; 8:75.
6. Arab M, Noei TS, Talayeh M, Ebrahimi A, Nakhlian N, Tabatabaei Shoja NK, Raoufi M. Retroperitoneal lipoma, a rare cause of pelvic mass in women. Caspian J Intern Med. 2021;12(Suppl 2):495-499.