

A Rare Case of Round Ligament Leiomyoma: An Inguinal Mass

HARISH E¹, SOWMYA N S², INDUDHARA P B³

ABSTRACT

Tumours of round ligament of uterus are rare. Leiomyoma of the round ligament can present as inguinal swelling mimicking an incarcerated/irreducible hernia / inguinal secondaries / lymph node. It arises from smooth muscle of round ligament. It can be diagnosed preoperatively by CT scan or following exploration. Surgery is the treatment of choice for this condition.

CASE REPORT

Forty year old female patient presents with history of pain abdomen and left inguinal swelling. No history of vomiting or abdominal distension. Patient underwent simple hysterectomy for fibroid uterus 18 years back. On examination left inguinal mass of size 3 x 4 cm noted, irreducible, cough impulse was equivocal. Per abdomen examination shows a vague mass with ill defined borders on left iliac fossa. Ultrasound abdomen shows a cystic mass in left iliac fossa with a well defined mass in left inguinal region. CT scan revealed a left adnexal cystic swelling with a well defined left iliac mass, no ascites, no adenopathy. Ovarian malignancy was ruled out with following investigations. FNAC of inguinal mass shows no e/o malignancy. CEA-0.7 ng/ml, CA 125 - 9.2U/ML, AFP- 1.23 ng/ml. On exploration of abdomen, simple left ovarian cyst noted which was completely removed. Left iliac swelling was found to be rubbery in consistency and was found to be arising from left round ligament, which was excised completely and sent for histopathological examination. Histopathological revealed Left inguinal mass as a leiomyoma of round ligament and left ovarian simple cyst. Round ligament leiomyoma is very rare and only few cases have been reported world wide [Table/Fig-1-4].

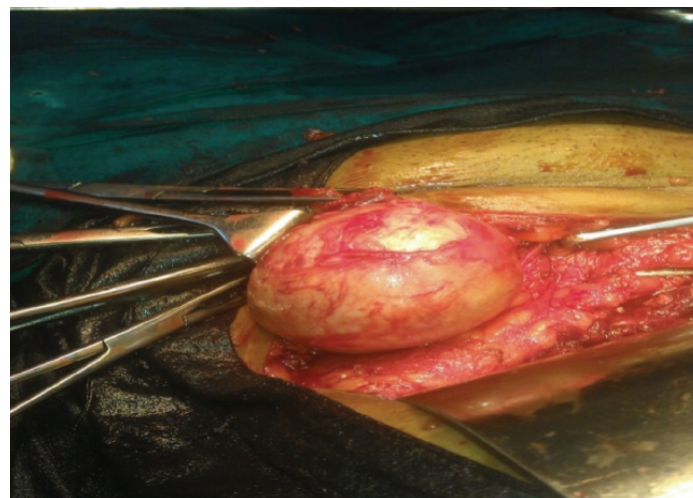
DISCUSSION

Leiomyoma of the uterus is common, but leiomyoma of round ligament is rare. Fifty percent of round ligament leiomyomas present

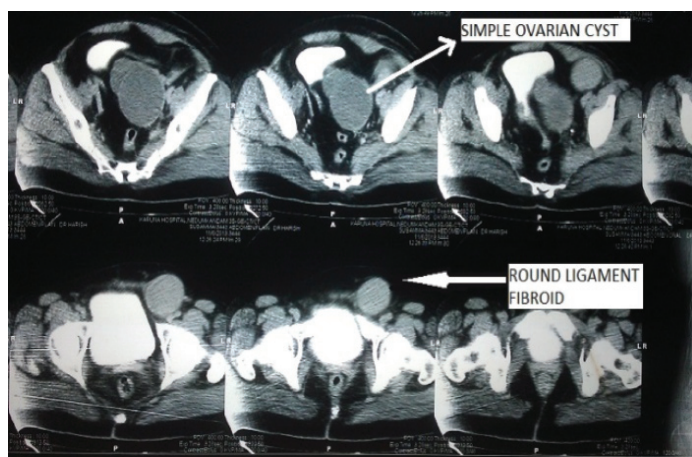
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with uterine fibroids [1]. Most commonly arise from extraperitoneal end of round ligament. Common on right side [1]. The transformation of myofibrous structure of female genital tract to leiomyoma involves somatic mutation of smooth muscles and complex interaction between sex steroids and growth factors. Estrogen is major promoter of growth, the role of progesterone is still unclear.

It can mimic incarcerated inguinal hernia or inguinal lymphadenopathy. CT scan has following features – well-circumscribed,



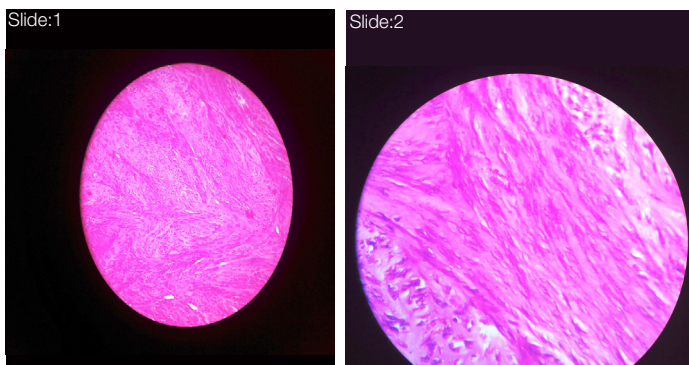
[Table/Fig-2]: Intra operative pictures:round ligament fibroid 1



[Table/Fig-5]: CT ABDOMEN: Showing ovarian cyst on left side with a well defined left inguinal mass [1-3]



[Table/Fig-3]: Round ligament fibroid 2



[Table/Fig-4]: Histopathology Showing whorls of smooth muscle fibres

heterogenous, well-differentiated mass in inguinal region. Sometimes associated with calcifications that may be mottled, whorled, streaked, curvilinear. Surgical exploration is the treatment of choice would differentiate between leiomyoma, inguinal lymphadenopathy and incarcerated hernia.

CONCLUSION

Round ligament leiomyoma is a rare condition which can mimic an incarcerated/irreducible hernia or inguinal lymphadenopathy (carcinoma ovary with inguinal metastasis in this case). Round ligament leiomyoma should be considered as differential diagnosis for inguinal swellings in females. CT scan can differentiate but surgical exploration can provide relief to the patient and diagnose exact nature of the swelling.

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PARTICULARS OF CONTRIBUTORS:

1. Consultant Surgeon, Department of General Surgery, Karuna Hospital, Nedumkandam, Idukki District, Kerala, India.
2. Karuna Hospital, Nedumkandam, Idukki District, Kerala, India.
3. Post Graduate, Department of Pathology, VIMS, Bellary, Karnataka, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Sowmya N S,
Karuna Hospital, Nedumkandam, Idukki District, Kerala, India.
Phone : 9686980499, E-mail : sowmyans9@gmail.com

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