



A rare inguinal mass: Round ligament leiomyoma



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ABSTRACT

INTRODUCTION: Leiomyoma of the round ligament is a rare condition and usually appears like an inguinal hernia.

PRESENTATION OF CASE: We report a case of a 40 year-old women found to have an inguinal mass which it was finally diagnosed as leiomyoma.

The patient was admitted to our hospital with a history of painless groin mass. The mass was thought to be irreducible inguinal hernia. Surgical exploration demonstrated a round ligament leiomyoma.

DISCUSSION: A smooth muscle tumor in the round ligament of the uterus in the inguinal region is a rare entity and can be mistaken for an irreducible inguinal hernia. It is a rare condition occurring predominantly in premenopausal middle-aged women. Abdominal, inguinal, and vulvar locations have been described. Surgical excision is the curative treatment.

CONCLUSION: Leiomyoma of the round ligament should be entertained as a possible etiology of inguinal mass.

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1. Introduction

Benign and malignant masses can be found in the inguinal canal. Round ligament leiomyoma is rare benign lesion. It usually appears like an inguinal hernia. A 40 year old patient with round ligament leiomyoma is presented.

2. Presentation of case

A 40 year-old women presented with a right inguinal mass, of which she had been aware for about 1 year. She had mildly tender, non-indurated inguinal mass. It was relatively hard and could not be reduced into the abdominal cavity like an irreducible hernia. Sonography revealed a heterogeneous hypoechoic mass filling right inguinal area. The after fully she underwent an operation and the right inguinal canal was explored. Approximately 6 cm × 6 cm in diameter, covered with a layer of white fibrous tissue, well circumscribed, with a pedunculated mass was discovered (Fig. 1). It origin was from the inguinal insertion of the round ligament. The mass was totally excised. The patient was discharged on the first post-operative day. Histological examination showed clear boundaries, uniform, smooth muscle without atypia, pleomorphism and eosinophilic necrosis. Immunohistochemical stains for smooth muscle actin was positive in tumor cells whereas stains for CD34 was negative (Fig. 2). At one year follow up, the patient healthy and no recurrence of the leiomyoma was found.



Fig. 1. Appearance of right inguinal canal.

3. Discussion

The after are causes of inguinal masses vary from benign to malignant processes. Inguinal hernias are most common cause. Other differential diagnoses are tumors arising from different structures of inguinal canal, preperitoneal lipoma, lymphadenitis, hematoma, abscess, neurofibroma, desmoid tumor, femoral artery aneurysm, uterine fibroids, endometriosis, saphena magna thrombophlebitis, metastases, dermoid and epidermoid cysts.¹ The most commonly found tumors are leiomyomas, followed by endometriosis and mesothelial cysts.¹ Leiomyoma of the extraperitoneal round ligament is rare. Only a few cases have been reported in the literature.^{2–7}

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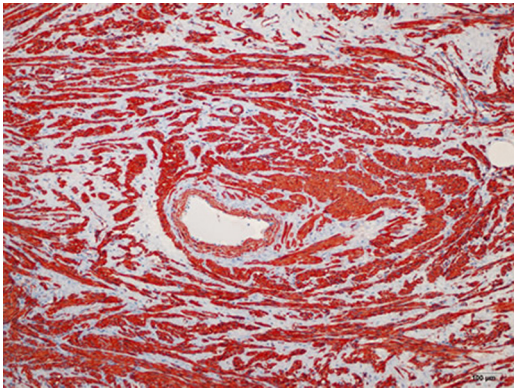


Fig. 2. Immunohistochemical stains for smooth muscle actin.

4. Conclusion

Leiomyoma of the round ligament must be entertained as a possible etiology of inguinal mass. An after of surgical excision of the tumor is adequate treatment as it distinguishes between a rare leiomyoma or an inguinal hernia.

Conflict of interest

None.

Funding

None.

Ethical approval

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

Authors contribution

Elif Colak had done study design, data collections and writing of the manuscript. Nuraydin Ozlem did critical revision of manuscript. Sadık Keşmer and Kadir Yildirim had done data collections and critical revision of manuscript.

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