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Case Report *Volume 6 Issue 1*

Round Ligament Fibroid – An Uncommon Cause for Pelvic Pain

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Abstract

Round ligament fibroids are rare tumors and can present as vulval, inguinal, and adnexal masses. A 27-year-old unmarried female presented with pelvic pain that persisted for a few days. Pelvic ultrasonography detected a well-defined solid hypoechoic lesion of size 35 x 28 mm adjacent to the right ovary with minimal vascularity noted at the lesion's margins. MRI showed a well-defined solid lesion measuring 3.4 x 3.5 x 2.4 cm in the right adnexa, seen separately from the right ovary and focally abutting it. All tumor markers were normal. Laparoscopic exploration revealed a well-defined pink solid mass from the right round ligament and histopathology revealed a leiomyoma. Diagnosing round ligament fibroids can be challenging; diagnostic laparoscopy is the gold standard.

Keywords: Round Ligament Fibroids; Hypoechoic Lesion; Laparoscopy; Leiomyomas; Ultrasonography; Extraperitoneal Region; Pain

Introduction

Round ligament fibroids are uncommon benign tumors; they can arise from any part of the round ligament either extra-abdominal or intra-abdominal. They can present as vulval, inguinal, and adnexal masses [1]. The intra-abdominal fibroid may be pedunculated or grow between the broad ligaments' leaves [2]. Most round ligament fibroids are asymptomatic and are detected incidentally. Symptomatic benign round ligament fibroids usually occur in the vulval area [1]. Intra-abdominal round ligament fibroids are asymptomatic and rarely present with pain until they are large, mean dimension varies from 0.5-15 cms. We present a young patient who was admitted to the hospital with complaints of pelvic pain and was managed laparoscopically. The histopathological diagnosis was round ligament leiomyoma.

Case Report

A 27-year-old unmarried female presented to our outpatient unit with severe pelvic pain that persisted for a few days. The pain was dragging and she could not even stand erect when the pain started. She had regular menstrual periods, and her medical history was unremarkable. On ultrasound evaluation a well-defined solid hypoechoic lesion of size 35 x 28 mm was detected in the right adnexa just adjacent to the right ovary with minimal vascularity at the margins of the lesion. A contrast-enhanced MRI pelvis showed a well-defined solid lesion measuring 3.4 x 3.5 x 2.4 cm noted in the right adnexa, seen separately from the right ovary and focally abutting it, with possible differentials being broad ligament fibroid and desmoid tumor. The preoperative serum CA 125 level was 18.5 U/mL, and a diagnostic laparoscopy was planned for the

adnexal mass. Laparoscopic exploration revealed a normal uterus, with normal ovaries and tubes. A well-defined, pedunculated pink coloured solid mass arising from the right round ligament (Figures 1 & 2). The mass was grasped using endoscopic grasping forceps and resected with a Harmonic scalpel. No macroscopic abnormalities were observed on the peritoneal surface or in other abdominal organs. After a nonremarkable postoperative period, she was discharged on her third postoperative day. The final histopathological diagnosis was leiomyoma.

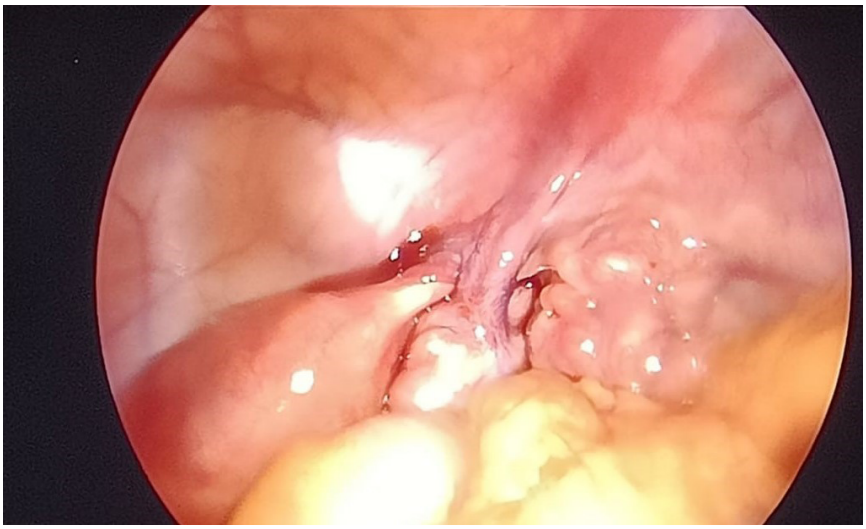

Figure 1: Fibroid arising from round ligament.

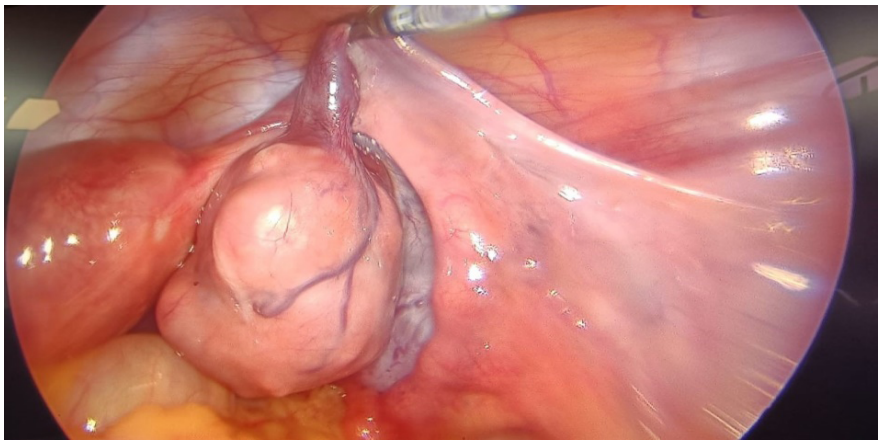

Figure 2: Round ligament fibroid taking supply from Sampson's artery.

Discussion

Uterine fibroids or leiomyomas are commonly occurring benign tumors however tumors of the round ligament of the uterus are quite rare. More than half of round ligament fibroids occur in the extraperitoneal portion of the round ligament and commonly on the right side [2].

The round ligament consists of connective tissues, smooth muscle fibers, vessels, and nerves. Uterine fibroids are one of the most common benign gynecological tumors and are derived from smooth muscle fibers [3,4].

Round ligament fibroids are usually asymptomatic or may present with pelvic pain or as vulvar, inguinal or pelvic masses [3]. Our patient presented with chronic pain abdomen with acute exacerbations. We performed a diagnostic laparoscopy which revealed a pedunculated round ligament mass which we sent for histopathological testing, revealing a round ligament fibroid.

Round ligament fibroids are an uncommon cause of pelvic pain which can be easily missed. Two-thirds of fibroids occur in the extraperitoneal region, which includes the inguinal region and the vulva, and are encountered as labial or inguinal lesions [5]. Fibroids arising from intraperitoneal portion of round ligament are relatively rare, asymptomatic and are diagnosed incidentally. Pain arises when there is torsion of the fibroid. However, in our case, the stretch on the round ligament was causing the pain. Intra-abdominal round ligament fibroids, as found in our patient, are less commonly reported. Diagnosis can be done by ultrasonography and MRI; however, laparoscopy is the gold standard for diagnosis and management [6].

Conclusion

The diagnosis of round ligament fibroids is challenging. The presentation may be asymptomatic but Leiomyoma of the round ligament should be kept as a differential diagnosis when dealing with pelvic masses with normal tumor markers.

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Ethical Consideration

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