

Unveiling the Vaginal Myoma Camouflage: An Interesting Rare Case Report

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Abstract:

Leiomyoma in vagina are rare occurrences with very small number of cases reported in literature. It has various clinical manifestations depending on the size and location of the vagina. Here, we report a case of a 37 year old lady who presented to our OPD with complaints of mass per vagina since 6 months with complaints of dyspareunia and no urinary symptoms. On local examination, a mass of size 4 x 4 cm noted in the anterior vaginal wall pushing the external urinary meatus to the right side. MRI imaging revealed a well-defined heterogeneously enhancing lesion measuring 3.2 x 3.7x 2.7 cm involving the left lateral and anterior wall of lower vagina- likely leiomyoma. Surgical excision of the tumor was done. Histopathological examination confirmed the diagnosis of vaginal leiomyoma.

Keywords: Vaginal Leiomyoma, Benign Tumor, Rare.

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Introduction

Vaginal leiomyomas are benign tumors with very rare occurrences which arise from smooth muscle cells present in the vagina. It remains an uncommon entity with only about 300 reported cases since the first detected case back in 1733 by Denys de Leyden.[1] Leiomyomas constitute 4.5% of all the solid tumors of vagina[2]. It is commonly seen in the age group ranging from 35 to 50 years and are reported to be more common among Caucasian women.[3]It usually develops as a solitary well defined mass which can develop anywhere within the vagina.

However, it is more commonly observed on the anterior vaginal wall (69.5%) than on the posterior (17%) and lateral (13.5%) walls.[4,5] It can present with various symptoms which include pelvic pressure, dyspareunia and voiding symptoms. Malignant transformation is rare, although it is more frequently observed in cases where the tumor is located on the posterior wall of the vagina. In a series of 11 cases, the reported rate of malignancy was 9.1%.[6]

Case Report

A 37 year-old married P2L2A1 came with complaints of mass per vagina since 6 months with h/o dyspareunia with no urinary symptoms. On local examination, an anterior vaginal wall mass of size 4 x 4 cm noticed. On per speculum examination the mass is pushing the external

urethral meatus to extreme right side. On palpation the mass has smooth surface, regular margin, non-mobile, non-tender with tense cystic to firm in consistency.

On ultrasound examination, a well-defined heterogeneously predominantly hyperechoic lesion along the anterolateral wall of vagina was noted. CE-MRI showed a well-defined heterogeneously enhancing, smoothly marginated round altered signal intensity lesion measuring 3.2 x 3.7x 2.7 cm involving the left lateral and anterior wall of lower vagina- likely leiomyoma and the lesion was abutting the urethra medially and displacing it laterally to the right side with maintained fat planes.

Vaginal excision of the tumor was done with metal urethral catheter in situ for safe dissection. Hydrodissection was done with vasopressin and tumor was excised in toto and sent for HPE.

Histopathology report:

Macroscopy: 5 x 3 cm tumor with external capsule noted; Cut surface - Grey white with whorled appearance

Microscopy: section studied shows tissue comprising of spindle cells arranged in interlacing fascicles in whorled pattern. Individual cells are spindle shaped with central bland nuclei and

pointed ends. Secondary changes like hyalinization

also seen.

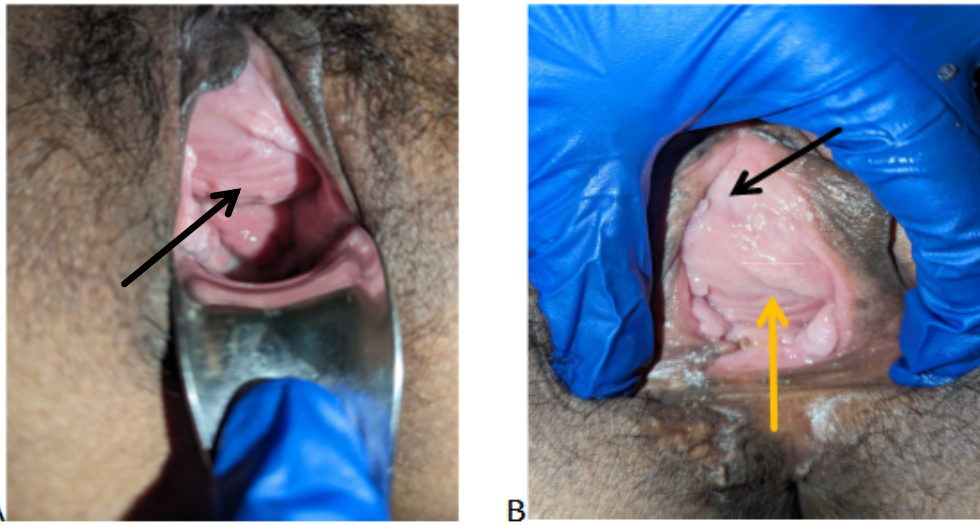


Figure 1: (A) Arrow showing the tumor arising from anterior vaginal wall ; (B) the tumor [yellow arrow] is seen pushing the external urethral meatus to the right side [black arrow]

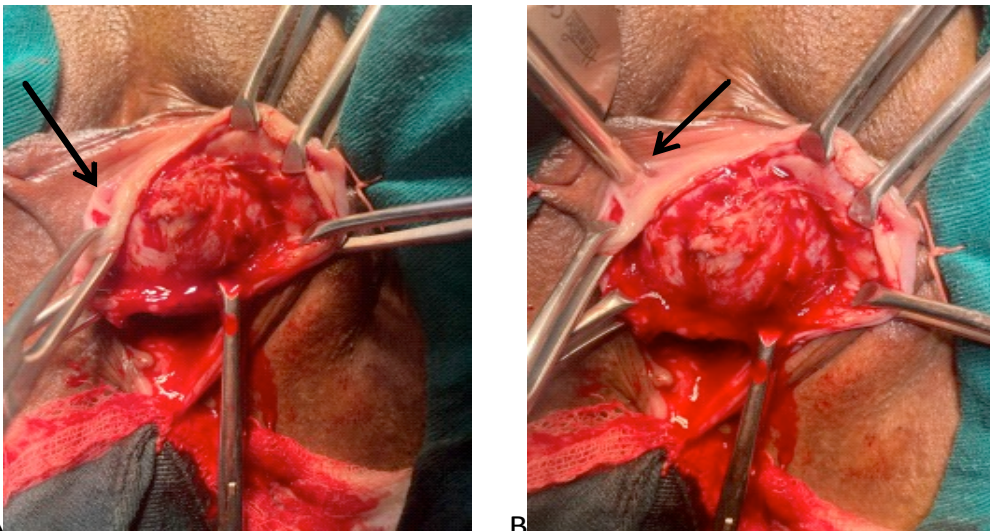


Figure 2: (A)Tumor seen pushing the external urinary meatus(arrow) to the right side ; (B) arrow showing a metal catheter insitu

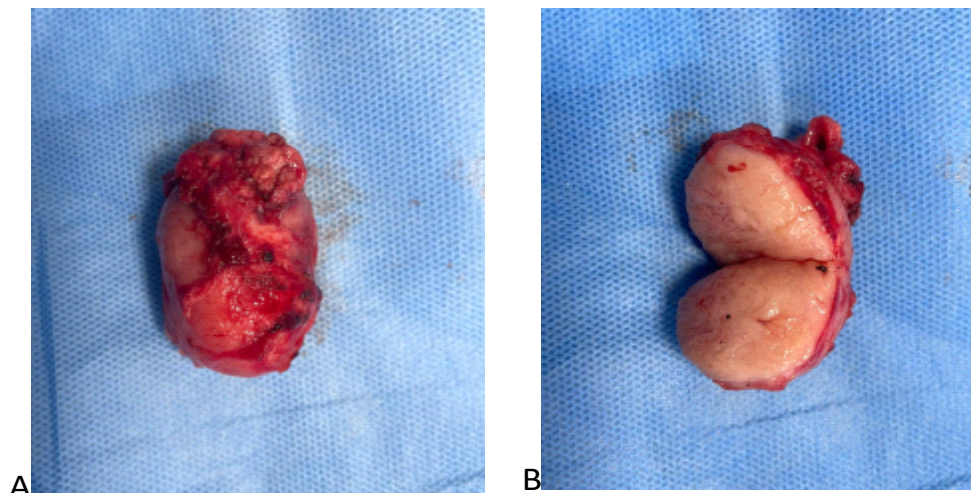


Figure 3: (A) the resected tumor; (B) the cut section showing the whorled pattern

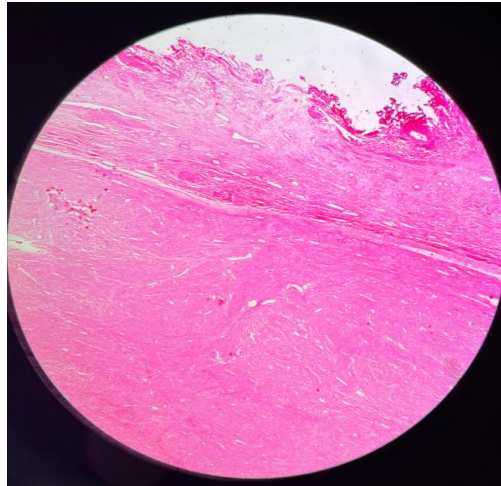


Figure 4: Microscopy showing spindle shaped cells

Discussion

Ectopic leiomyoma is a rare, benign tumor originating from smooth muscle tissues that can be found in various locations, such as the ovary, round ligament, broad ligament, and, in rare cases, the vulva and vagina.[4]

It can present as asymptomatic tumor and is often noticed during gynecological examination. Depending on the location it can present with various symptoms such as dysuria, dyspareunia, vaginal bleeding, lower abdominal pain, low back pain, and other signs of urinary obstruction.

The differential diagnosis of a vaginal mass includes Gartner duct cyst, cystocele, urethral diverticulum, epidermal inclusion cyst, ureterocoele, vaginal cyst, Skene duct abscess. On examination a non-tender mass with various consistency (cystic, semicystic, or solid) may be observed. The variations in consistency are a significant factor contributing to the challenge of accurately diagnosing the condition through clinical examination alone. [7]

Diagnosis of the lesion can be made using the imaging techniques such as ultrasound and MRI to localize the lesion within vagina. The treatment of choice is surgical removal through vaginal route with urethral catheterisation for safer approach. However, large tumors extending to upper part of vagina which are inaccessible for surgical excision through vaginal route may be tackled by combined abdominoperineal approach.

Conclusion

Vaginal leiomyomas are rare occurrences that can be easily misdiagnosed and may or may not be associated with leiomyomas in other parts. It can either be asymptomatic or present with vaginal and/or urinary symptoms depending the size of the mass. The mainstay of the treatment remains surgical excision.

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