Leiomyoma: a common benign tumor at an unusual location

N.V. Manjula,[1] Jyothi G.S.[1]

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Abstract

Leiomyoma in the female genital tract is a common benign tumor of the uterus, followed by cervix, round ligament and inguinal ligament. Vaginal leiomyoma is a rare entity with only about 300 reported cases.[1] Here, we report a case of a vaginal leiomyoma in a 22 year old nullipara who presented with dyspareunia and infertility. Vaginal examination revealed a mass in the anterior vaginal wall. MRI of the pelvis revealed a hypoechogenic and hypointense mass in the anterior vaginal wall. Excision of the tumor was done by the vaginal route. Histopathology revealed a benign leiomyoma.

[1]MS Ramaiah Medical College, Bangalore, India

Introduction

Vaginal leiomyomas remain an uncommon entity with only 300 reported cases.[1] Other uncommon vaginal tumors are papilloma, hemangioma, and mucosal polyps. Vaginal fibroids rarely exist as a primary tumor of the vagina. These tumors are benign, solitary, smooth muscle neoplasms, and when large in size, symptoms may include vaginal discharge or bleeding, dyspareunia and urinary retention. The differential diagnosis of anterior vaginal tumors includes urethral diverticulum, fibroepithelial polyp, cystocele, Skene duct abscess or vaginal malignancy.[2] We report a case of a vaginal leiomyoma in a nullipara.

Case Report

A 22 year old nullipara presented with dyspareunia and infertility for 3 years. Her cycles were regular, with moderate flow and dysmenorrhea. General and systemic examinations were normal. Vaginal examination revealed a mass measuring about 6 cm x 6 cm in the anterior vaginal wall, 2 cm below the urethral meatus. On speculum examination, the cervix was pushed posteriorly. The tumor was firm in consistency and felt separately from the cervix and the uterus and no nodularity was felt in the pouch of douglas (Figure 1).

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Corresponding author: *N V Manjula, MS Ramaiah Medical College, Bangalore, India, manjulanv_kv@yahoo.co.in*

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Figure 1. Mass in the anterior vaginal wall

MRI revealed a large T2 heterogeneous predominantly hypo intense mass (62 mm x 52 mm x 58 mm) in the vesicovaginal location with homogenous contrast enhancement (Figure 2).

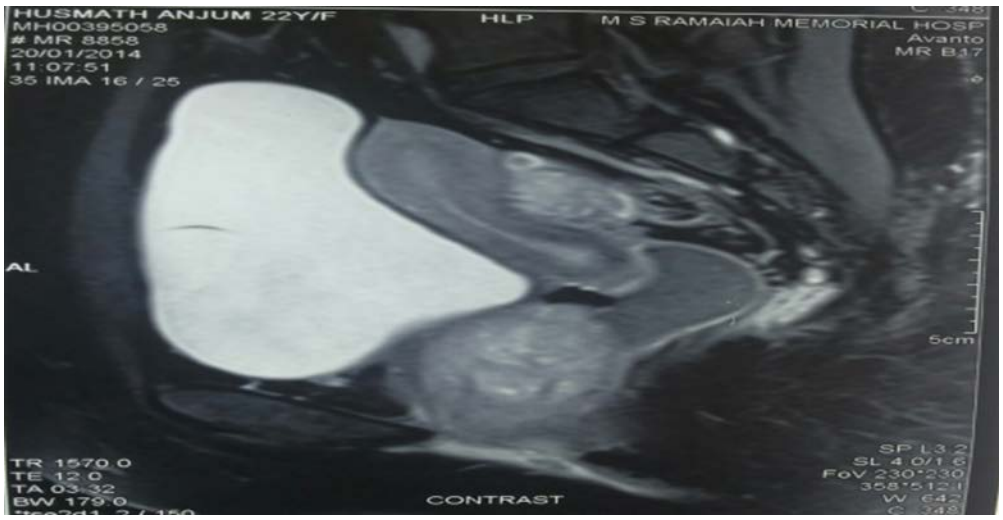

Figure 2. T2 Image of a heterogenous mass in the vesicovaginal location

The patient underwent laparoscopy with the following findings: both tubes were patent, the ovaries were polycystic and the uterus appeared normal. The bladder was catheterized with Foley's and the tumor was excised by the vaginal route. With a 3 cm vertical incision on the anterior vaginal wall one

centimeter below the external urethra meatus the tumor was enucleated by blunt dissection. The tumor was firm in consistency, well capsulated, measuring 8 cm x 7 cm x 4 cm and weighing 80 grams (Figure 3). Histopathology revealed leiomyoma.

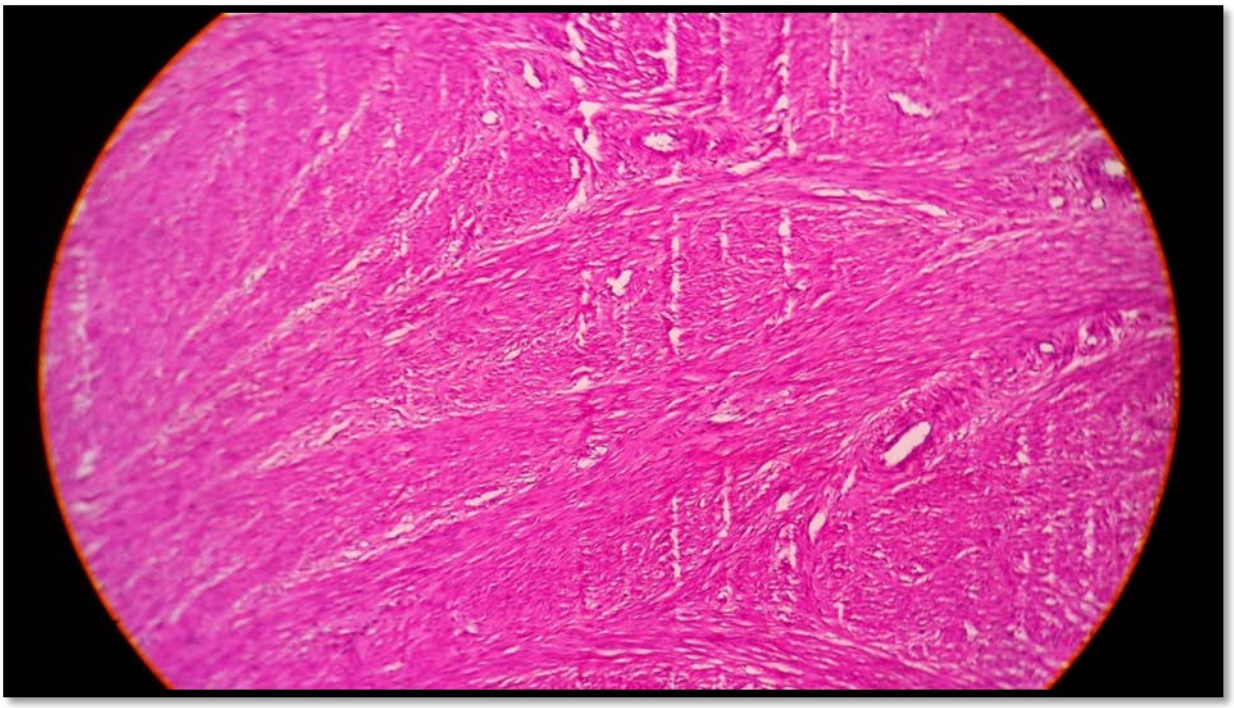

Figure 3. Histopathology showing spindle cells with whorled appearance

Discussion

The incidence of vaginal leiomyoma is very rare with only around 300 cases reported. It was first described in 1733 by Denys de Leyden.[1,2] Uterine leiomyoma are benign tumors of the myometrium, although uncommon, loci have also been described in the urinary bladder, round ligament and broad ligament.[3] In the vagina, they present primarily through the anterior wall and secondarily through the lateral walls.[4] They may arise from the posterior wall even after hysterectomy in the form of ischiorectal abscess. Initially, vaginal leiomyoma may be asymptomatic. With the growth of the tumor, compression occurs which may precipitate symptoms.[5] Leron et. al. reported symptoms of prolapse with urinary urgency and urge incontinence.[6] In our case, the subject presented with dyspareunia and no compressive symptoms. Urethral leiomyoma has also been reported presenting with pain and swelling in the urethra and difficulty in micturition.[7]

Preoperative diagnosis by ultrasound

may be difficult, but MRI clinches the diagnosis.[8,9] Surgical excision by the vaginal route, with urethral catheterization to protect the urethra from injuries, is the treatment of choice.[10] Follow up is important because while uncommon recurrence has been reported.[11]

Conclusion

Vaginal leiomyoma are rare in compared to uterine leiomyoma. Vaginal leiomyoma should be the differential diagnosis in anterior wall tumors with follow up to monitor for recurrence of the tumor.

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