

Vaginal Leiomyoma: Case Report

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ABSTRACT--- *Leiomyomas are the most common pelvic tumor in women and they arise in reproductive-age women. They are usually described according to their location in the uterus. Vaginal leiomyoma is a rare case. Mrs. R, 24 years old, primipara who presented with vaginal mass. Vaginal examination revealed a mass in the lateral right vaginal wall measuring 6 x 5 x 4 cm. A pelvic CT scan was performed revealing a homogenous mass with low density and smooth borders inside vaginal cavum. Vaginal myomectomy was performed. Histopathology revealed a benign leiomyoma. There was no complication during hospital care and she was sent home on her 3rd day after the surgery. Vaginal leiomyoma is the most common mesenchymal neoplasm of the vagina. Vaginal leiomyoma should considered in women with mass in the vagina.*

Keywords--- *vaginal leiomyoma, myomectomy*

I. INTRODUCTION

Leiomyoma are the most common pelvic tumor in women. They are noncancerous monoclonal tumors arising from the smooth muscle cells and fibroblast of the myometrium. They arise in reproductive-age women and, when symptomatic, typically present with symptoms of abnormal uterine bleeding an/or pressure. They are described by FIGO according to their location in the uterus (Steward & Laughlin-Tommaso, 2019). Vaginal leiomyomas remain an uncommon entity with only about 300 reported cases since the first detected case back in 1733. These tumors arise most commonly from the anterior vaginal wall causing varied clinical manifestations and they may or may not be associated with other leiomyomas in another location in the body (Chakrabarti, De, & Pati, 2011).

For the removal of symptomatic leiomyoma, the choice of route for undertaking a myomectomy is depends upon the size, number, location of the tumor, and the skill of the surgeon. First described in 1994 by Magos and colleagues vaginal myomectomy allows surgical management of uterine leiomyomas via vaginal incision through which the leiomyomas are removed and uterine suturing is performed (Deval, Rousset & Kayani; 2013). We report cases with vaginal of the mass in reproductive-age women.

II. CASE REPORT

Mrs R, 24 years old, primipara, presented with protrusion of the mass in vagina. Her medical and surgical histories were unremarkable. Examination revealed a round non-pedunculated mass, intact mucosa, solid, mobile, non-tender mass, measuring 5 cm in diameter (figure 2). Pelvic CT scan showing a homogenous mass in the vaginal

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cavum, low density, and relatively smooth border. normal sized uterus, normal bladder and intact pelvic bones (figure 1).

We performed the myomectomy of the mass through vaginal route. The transverse incision was done followed by myomectomy (figure 3). The mass was resected in various sizes until the entire tumor removed from the vaginal wall (figure 4). Grossly, the mass measured 6 x 5 x 4 cm with whorl like pattern on each cut sections and 200 grams weight (figure 4). We closed the incision using Polyglactin 910 suture no. 2-0 layer by layer with continuous technique We closed the incision in transverse manner. We did a vaginal tampon for 24 hours for the hemostatic purposes. There was no complication during the surgery. She was sent home on her 3rd day after the surgery. Indwelling foley catheter maintained for 2 days to rest the urethra. On 1st week post surgery, she had follow up in outpatient care unit, we found well recovering surgery wound in vaginal wall, no infection and no stress incontinence. Histopathologic evaluation of the surgical specimen revealed leiomyoma (figure 5).



Figure 1

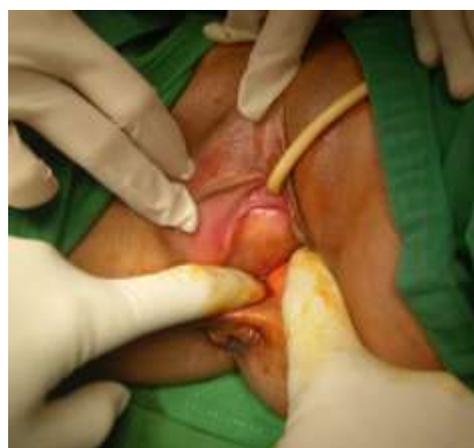


Figure 2



Figure 3



Figure 4



Figure 5

III. DISCUSSION

Tumors of vagina are rare and there are only about 300 reported cases of vaginal leiomyomas since first described case in 1733 by Denys de Leyden. Leiomyomas in female are common in the uterus and to some extent in the cervix followed by ligaments. The incidence is difficult to determinate since there are few longitudinal studies. The occurrence in vagina is very rare. In common, leiomyomas prevalence increases with age during the reproductive years. Vaginal leiomyomas are commonly seen in the age group from 35 – 50 years and are reported to be more common among Caucasian women. The location arising from the midline anterior wall and less

commonly from the posterior and lateral walls (Bennet & Erlich, 1941; Young, et al., 1991 & Shimada, et al., 2002). These masses may occur anywhere within the vagina and vary from 0.5 – 15 cm in diameter. They commonly present as smooth, firm, round masses and may be misdiagnosed as urethral diverticulum or paraurethral cyst. Usually the tumor is single and most are small and slow growing (Wu, Y, et al., 2015).

The majority of myomas are small and asymptomatics, but many women with fibroids have significant problems that interfere with some aspect of their lives and warrant therapy. These symptoms are related to the number, size, and location of the tumors. Heavy or prolonged menstrual bleeding, bulk related symptoms such as pelvic pressure and pain and reproductive dysfunction are the common presentations (Steward & Laughlin-Tommaso, 2019).

Ultrasonography of the pelvis remain the first-line study used to evaluate for uterine fibroids, but give limited information with the vaginal leiomyoma. Poor vaginal tissue characterisation excludes computerised tomography (CT) as modality of choice in evaluating the female pelvis (Wethmar, Mouton, & Dreyer, 2017). Additional imaging necessary when complex intervention is planned such as vaginal leiomyoma (Steward & Laughlin-Tommaso, 2019). MRI provides better evaluation on the vagina and its surrounding tissues. MRI is a more reliable diagnostic tool in evaluating normal vaginal anatomy and vaginal disease due to its soft tissue characterisation and depiction of anatomical detail. T2-weighted sequences are found to best depict the vaginal anatomy. (Clair, et al., 2001; Wethmar, Mouton, & Dreyer, 2017). Histopathological confirmation is the gold standard of diagnosis. (Chakrabarti, De, & Pati, 2011). Often the nature of tumor is only known for certain on histologic examination, at which time 9 -12% will be seen to be actually leiomyosarcomas (Godwin, et al. 2002).

Surgical removal of the vaginal leiomyoma through vaginal approach with the use of urethral catheterization to protect the urethra during surgery is the treatment of choice. Adequate vaginal access, uterine mobility, and moderate size are essential prerequisites. Accurate preoperative assessment of leiomyoma size, localization and vascularization is gatekeeper of complication or surgical defeat. Excision or enucleation through a vaginal approach is often curative and is recommended to confirm the diagnosis, to exclude malignant histology, and also alleviate symptoms. In case of large, abdominal approach is preferred tumors (Deval, Rousset & Kayani; 2013; Wu, Y, 2015). Care must be taken not to injure the urethra and bladder – surgical planes should be developed and tumor is then carefully resected from the underlying structures. The patient should be followed up for chance of recurrence. Although rare, cases of recurrent vaginal leiomyoma have been described. Literature about vaginal leiomyoma is scarce and limited to some case reports only.

IV. CONCLUSION

Vaginal leiomyomas are rare cases compared to uterine leiomyomas. Vaginal leiomyomas should be considered in reproductive-aged women with vaginal mass and associated classic leiomyomas presentations.

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