



# International Journal of Surgery Science

E-ISSN: 2616-3470  
P-ISSN: 2616-3462  
© Surgery Science  
www.surgeryscience.com  
2020; 4(1): 254-256  
Received: 03-11-2019  
Accepted: 07-12-2019

**Jennifer Joy J**  
MBBS Student, Department of  
General Surgery, Saveetha Medical  
College and Hospital, Chennai,  
Tamil Nadu, India

**Ann Rhoda Abraham**  
Junior Resident, Department of  
General Surgery, Saveetha Medical  
College and Hospital, Chennai,  
Tamil Nadu, India

**Arihant R**  
MBBS Student, Department of  
General Surgery, Saveetha Medical  
College and Hospital, Chennai,  
Tamil Nadu, India

**Agil S**  
Senior Resident, Department of  
General Surgery, Saveetha Medical  
College and Hospital, Chennai,  
Tamil Nadu, India

**M Vinoth**  
Senior Resident, Department of  
General Surgery, Saveetha Medical  
College and Hospital, Chennai,  
Tamil Nadu, India

**Arcot Rekha**  
Professor, Department of General  
Surgery, Saveetha Medical College  
and Hospital, Chennai, Tamil  
Nadu, India

**Corresponding Author:**  
**Ann Rhoda Abraham**  
Junior Resident, Department of  
General Surgery, Saveetha Medical  
College and Hospital, Chennai,  
Tamil Nadu, India

## A case of vaginal leiomyoma

**Jennifer Joy J, Ann Rhoda Abraham, Arihant R, Agil S, M Vinoth and Arcot Rekha**

DOI: <https://doi.org/10.33545/surgery.2020.v4.i1e.342>

### Abstract

Leiomyomas are common benign tumors seen in the uterus and are rare in the vagina. Here we report a 36 year old female who presented with a swelling in vulval region. Clinical examination and ultrasonography were performed. The tumor was excised and subsequent histopathology revealed a vaginal leiomyoma.

**Keywords:** vaginal leiomyoma, posterior vaginal wall, pedunculated, benign

### Introduction

Leiomyomas are mostly benign neoplasms of the uterus affecting 5-20% of the women in reproductive age group. Leiomyoma may be present without symptoms. However depending on size and location, they may contribute to menstrual irregularities, dysmenorrhea, infertility, abdominal pain, abdominal fullness, pressure symptoms and complications during pregnancy. Vaginal tumors are rare and may include papilloma, mucus polyp, and rarely leiomyoma.

### Case report

A 36 year old female presented with swelling in the vulval region for 6 years, gradually increasing in size over the years. There was history of pain over the swelling while walking. There was no history of dyspareunia, dysuria or menstrual abnormalities.

On examination a pedunculated polypoid lesion of size 6x5x3 cm was seen arising from the posterior vaginal wall at the level of fourchette. No tenderness was present. No external ulcer present. (fig 1)



**Fig 1:** Pedunculated polypoid growth arising from the posterior vaginal wall

Ultrasound perineal region showed a lobulated external mass lesion with heterogeneous echoes and minimal internal vascularity and a possibility of pedunculated vaginal fibroid was made. Excision biopsy was done (Fig 2)



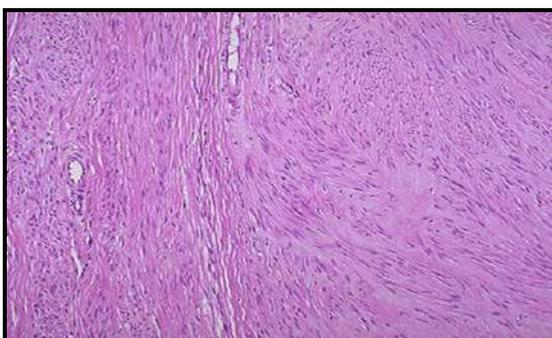
**Fig 2:** Image of pedunculated lesion after excision

At histopathology the Gross examination showed a 6x5x3 mass that showed a whorled appearance on cross section. (fig 3)



**Fig 3:** Cut section of pedunculated lesion

Microscopic examination revealed nonkeratinised stratified squamous epithelium with underlying circumscribed benign neoplasm composed of interlacing bundles of uniform smooth muscle fibers with areas of hyalinization. No atypia was made out. (fig 4)



**Fig 4:** Histopathology showing Uniform smooth muscle fibres

These features were consistent with benign leiomyomatous polyp with areas of hyalinization.

### Discussion

Vaginal tumors include cystic tumors (Gartner's duct cyst, paramesonephric duct cyst, inclusion cyst, endometriosis), leiomyoma, condyloma acuminatum, urethral diverticulum, fibroepithelial polyp, skene duct abscess or vaginal malignancy. Rare lesions include myxoma, hemangiopericytoma, neurofibroma, mixed cell tumor, granular cell myoblastoma and rhabdomyoma. Fibroepithelial polyps are usually small and may be multiple. They have squamous epithelial surface with a fibrovascular stalk and edematous stroma. Vaginal leiomyomas are an extremely rare entity and fall under extra uterine pelvic leiomyoma. They are extremely rare with only ~ 300 cases reported in literature [1]. It may occur anywhere along the vaginal canal and is usually non-tender, localized, mobile, and circumscribed. In female genital tract, leiomyomas are common in the uterus and to some extent in the cervix followed by the round ligament, ovary, utero-sacral ligament and inguinal canal [2]. In vagina they usually occur as well-circumscribed single mass, arising from the midline anterior wall [2, 3] and less commonly, from the posterior and lateral walls [4]. They may be asymptomatic but depending on the site of occurrence, they can give rise to varying symptoms including lower abdominal pain, dyspareunia, low back pain, vaginal bleeding, frequency of micturition, dysuria, or other features of urinary obstruction. These tumors can be intramural or pedunculated and can be solid as well as cystic. These tumors are usually benign and slow growing but sarcomatous transformation has been reported [5]. In magnetic resonance imaging, leiomyoma appear as well-demarcated solid masses of low signal intensity in T1- and T2-weighted images, with homogenous contrast enhancement, while leiomyosarcomas and other vaginal malignancies show characteristic high T2 signal intensity with irregular and heterogeneous areas of necrosis or hemorrhage [6, 7]. However, histopathological confirmation of diagnosis is necessary and also beneficial to rule out any possible focus of malignancy.

Complete excision of the tumor with its capsule and a surrounding rim of normal tissue are recommended for patients with a vaginal leiomyoma [8]. Dhaliwal *et al.* have specifically recommended the removal of the tumor en bloc to avoid any possible recurrence [9].

In Zhao's series, most epithelioid vulvar leiomyoma patients did not show recurrence at 2 years after excision, but three patients showed recurrence 11 months and 1 year and 10 years later [10]. Thus, long-term follow-up is encouraged for patients with vaginal leiomyoma.

### References

1. Young SB, Rose PG, Reuter KL. Vaginal fibromyomata: two cases with preoperative assessment, resection, and reconstruction. *Obstet Gynecol.* 1991; 78(5-2):972-4. Pubmed citation
2. Young SB, Rose PG, Reuter KL. Vaginal fibromyomata: Two cases with preoperative assessment, resection and reconstruction. *Obstet Gynecol.* 1991; 78:972-3
3. Shimada K, Ohashi I, Shibuya H, Tanabe F, Akashi T. MR imaging of an atypical vaginal leiomyoma. *Am J Roentg.* 2002; 178:752-4. [PubMed] [Google Scholar]
4. Elsayes KM, Narra VR, Dillman JR, Velcheti V, Hameed O, Tongdee R, *et al.* Vaginal Masses: Magnetic Resonance Imaging Features with Pathologic Correlation. *Acta Radiol.* 2007; 8:921-33. [PubMed] [Google Scholar]

5. Cobanoğlu O, Gürkan Zorlu C, Ergun Y, Kutluay L. Leiomyosarcoma of the vagina. *Eur J Obstet Gynecol Reprod Biol.* 1996; 70:205-7. [PubMed] [Google Scholar]
6. Bae J H, Choi SK, Kim JW. Vaginal leiomyoma: A case report and review of the literature. *J Women's Med.* 2008; 1:92-4. [Google Scholar]
7. Shadbolt CL, Coakley FV, Qayyum A, Donat SM. MRI of vaginal leiomyomas. *J Comput Assist Tomogr.* 2001; 25:355-7. [PubMed] [Google Scholar]
8. Zhao T, Liu X, Lu Y, "Myxoid epithelial leiomyoma of the vulva: a case report and literature review," *Case Reports in Obstetrics and Gynecology*, Article ID 894830. 2015; 2015:4.
9. Nielsen GP, Rosenberg AE, Koerner FC, Young RH, Scully RE, "Smooth-muscle tumors of the vulva: a clinicopathological study of 25 cases and review of the literature," *The American Journal of Surgical Pathology.* 1996; 20(7):779-793,
10. Dhaliwal LK, Das I, Gopalan S, "Recurrent leiomyoma of the vagina," *International Journal of Gynecology and Obstetrics.* 1992; 37(4):281-283.