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# **Smooth muscle tumor of uncertain malignant potential (STUMP) of Vulva**

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#### ABSTRACT

A 30-years old nulliparous lady presented with apparently recurrent leiomyoma of vulva and past history of repeated resections. She had firm bilobed non-tender vulval lump and underwent partial vulvectomy. Histopathology revealed Smooth muscle tumor of uncertain malignant potential (STUMP).

**Conclusion:** Vulvar leiomyoma is fairly uncommon and can often be misdiagnosed. Surgical excision and histopathological analysis is helpful/ recommended for final diagnosis of Vulvar STUMP. **Keywords:** leiomyoma, STUMP, vulval myoma

#### **INTRODUCTION**

Leiomyomas are benign monoclonal tumors, myometrial muscle being the most common site for its occurrence. They can develop anywhere smooth muscles are present such as vulva, vagina, ovaries, the urinary bladder, urethra, the round ligaments, the uterosacral ligaments, the inguinal canal and the retroperitoneum.<sup>1,2</sup> A wide spectrum of benign, premalignant, and malignant tumors can occur in the vulva region. Unilateral vulva swelling with a nodule in reproductive aged women is usually regarded as Bartholin's cyst.<sup>3</sup>

Corroborating with the cases described in the literature, here we report a 10cm bilobed vulvar lesion in a 30-year nulliparous woman who complained of rapid increase in size 6 months prior to the presentation. Though vulvar myomas are reported asymptomatic, they often present with swelling and perineal discomfort.

### CASE

A 30-year Nullipara lady presented to our institution with right labial mass for 3 years. The mass showed gradual progression in size over the last 6 months associated with fowl smelling discharge often mixed with blood. There is no history of abdominal pain, fever, urinary, intestinal disorders and weight loss. The nodule did not change in size or color during her menstrual cycle. She has history of excisional surgery 3 years ago. There was a bilobed firm and non-tender mass of 10x10cm size on right upper vulva. [Figure-1]



Figure-1: Bilobed Vulval Mass

The cervix was normal. Rectal examination did not reveal any abnormality. Abdominal ultrasound evidenced multiple intramural uterine leiomyomas with the largest measuring 28mm. Then she underwent Partial Vulvectomy as the diagnostic as well as therapeutic intervention; and that appeared intraoperatively as bilobed vulval fibroid.



Figure-2: Microscopy showing a benign tumor composed of sheets and fascicles of oval to spindle shaped cells with abundant dense cytoplasm and areas of hyalinization

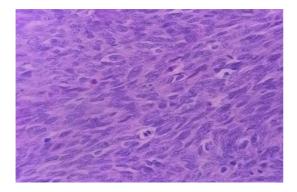


Figure-3: Spindle to oval cells with mild pleomorphism, moderate amount of eosinophilic cytoplasm and atypical mitosis

Case of Smooth muscle tumor of uncertain malignant potential (STUMP) was

confirmed after Histopathological examination report. [Fig-2 and 3] The patient recovered well but recurrence was observed 2 months later, and unfortunately follow up was lost.

#### DISCUSSION

Vulvar leiomyoma is a very rare benign mass, only 160 cases reported till date.<sup>5</sup> Leiomyoma beyond the uterus can be found at any anatomical site containing smooth muscle cells, and most reported sites are the vulva, ovaries, urinary bladder, and urethra.<sup>4,5</sup>

Nielsen et al<sup>6</sup> proposed a histopathological criterion to distinguish nature of lesions based on 4 features:

#### Features

- 1. >5 cm in widest dimension
- 2. infiltrative margins
- 3. >5 mitotic figures per 10 hpf

4. moderate to severe cytologic atypia Interpretation

- ≥3: sarcoma
- 2: Benign but atypical leiomyomas
- 1≤ benign leiomyomas

This case fulfills two of the features to classify as the benign but atypical leiomyoma.

Excision of the tumor with some of the surrounding normal tissue is the treatment of choice, for it decreases the rate of recurrence.<sup>6</sup>

Vulvar leiomyoma is a rare tumor that usually misdiagnosed as Bartholin's cyst preoperatively. Distinguishing between benign and malignant forms is also confusing, which makes vulvar leiomyoma a great diagnostic challenge.<sup>7</sup>

Transperineal ultrasonography can be helpful in the diagnosis of vulvar myoma.<sup>4</sup> Magnetic resonance imaging (MRI) is the most suitable technique for determining whether the tumor is benign or malignant.<sup>5</sup> However, transperineal ultrasonography and MRI was not done in this case.

The simultaneous development of vulval and uterine leiomyomas is very common like in this case.<sup>9</sup>

## CONCLUSIONS

Vulval leiomyoma is fairly uncommon and can often be misdiagnosed. Surgical excision and histopathological analysis is helpful for the final diagnosis of Vulval STUMP.

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