

Olgu Sunumu

# Vulvar Fibroepithelial Stromal Polyp in the Early Pregnancy

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## Abstract

**Aim:** Fibroepithelial stromal polyps of vulvovaginal region are uncommon tumors and their clinical features may overlap with those of malignant neoplasms. They have a wide range of morphologic appearances so a biopsy is often necessary to make a definitive diagnosis.

**Case:** We present a case of a 38-year-old woman with 9 weeks of pregnancy who developed a 15- cm polypoid lesion localized in the left labium. Total surgical resection of the lesion was performed. Histologically, in a hypercellular focal myxoid stroma, typically there were mesenchymal stellate cells, spindle- shaped cells and multinucleated giant cells. The clinical and immunohistochemical findings of this case suggest a fibroepithelial stromal polyp of the vulva. Her pregnancy progressed normally, and she underwent an uncomplicated vaginal delivery. The patient showed no evidence of recurrence one year after the resection.

**Conclusion:** This vulvar lesion has been evaluated as an example of giant fibroepithelial stromal polyp in association with pregnancy.

**Key words:** Giant fibroepithelial stromal polyp, vulva, pregnancy

## Introduction

Fibroepithelial stromal polyp (FEP) of the lower female genital tract are benign solitary or occasionally multiple lesions that are characterized by polypoid proliferation of stroma with overlying squamous epithelium (1, 2). These lesions present more commonly in the vulva, generally in middle aged women. They display a wide range of morphologic appearances and mostly the size of lesions is 1x2 cm but rarely it can reach an extremely large size up to 15- 20 cm<sup>3</sup>. Although there is a tendency for local recurrence after incomplete excision, and their

clinical features may overlap with those of malignant neoplasms, they behave in a benign fashion (4).

FEP may be associated with congenital lymphedema, psoriasis, Cowden disease, Crohn disease, Nonne- Mitoy- Meiges syndrome or pregnancy (5-8). They represent a hyperplastic proliferation of subepithelial myxoid stroma of the lower female genital tract to not defined factors (9).

We present a case of an extremely large, sessile vulval FEP of a young woman with 9 weeks of pregnancy.

## Case Report

A 38-year-old woman was referred to outpatient gynecology clinic with a 15 cm mass originating from her left labium majus and extending to the inguinal area (Fig. 1). It was noticed 5 months ago and increased in size rapidly in 2 months. She had no remarkable medical history but her laboratory data showed that she had a pregnancy of 9 weeks. Only in 5 months, the diameter of this solid mass enlarged to 15x 10x 6 cm. No ulcerations or nodules were noted. Total surgical resection of the mass was performed.

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Makalenin Geliş Tarihi: 23.03.2010  
Makalenin Kabul Tarihi: 11.11.2010



Fig. 1. Macroscopic appearance of the large, polypoid lesion.

The histopathologic examination revealed a FEP of the vulva. Histologically, in a hypercellular focal myxoid stroma, typically there are mesenchymal stellate cells, spindle shaped cells and multinucleated giant cells (Fig. 2, 3). Immunohistochemical studies showed that the lesion was negative for S-100, muscle specific actin, desmin and cytokeratine and was immunoreactive for desmin. Her pregnancy progressed normally, and she underwent an uncomplicated vaginal delivery. The patient showed no evidence of recurrence one year after the resection.

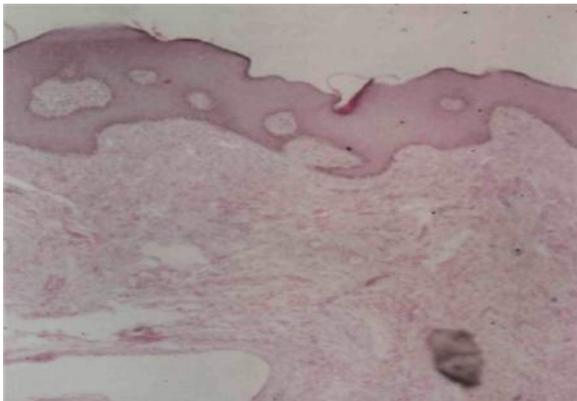


Fig. 2. A markedly hypercellular myxoid stroma is the basic histologic finding of FEPs.

### Discussion

FEPs of the female genital tract are benign lesions but they are often misdiagnosed as malignant. They present at any age but they occur generally in the reproductive age of the woman. The polyps are sessile or pedunculated and have a hypercellular stroma and may exhibit increased mitoses and bizarre cytomorphology. In

approximately 15 % of cases reported, these lesions occur during pregnancy and are more commonly multiple. After delivery, spontaneous regression may occur (7).

The mesenchymal neoplasms of the vulvovaginal region are fibroepithelial stromal polyp, cellular angiofibroma, angiofibroma, angiofibroma, embryonal rbdomyosarcoma, aggressive angiofibroma (10). In our case, the unusually large size of the lesion and the rapid growth raised the possibility of a locally aggressive tumor with malignancy. To exclude the possibility of an aggressive angiofibroma is the main differential diagnostic problem and because of their diverse biological behavior, a correct microscopic diagnosis should be done. However, this case differs from aggressive angiofibroma by being macroscopically in a polypoid appearance and histologically having superficial dermis involvement.



Fig. 3. Stellate and multinucleate stromal cells are characteristics of FEPs.

In the presented case, hormonal changes associated with pregnancy may be a risk factor for FEP. Patient had a history of the lesion originating 5 months ago but it grew rapidly in the last 3 months since she had a 9 weeks of gestation, there may be a potential role of hormonal influence in the pathogenesis of FEP.

Recently, Orosz et al. described an unusual polypoid mass in a 16- year old girl with congenital lymphedema (11). FEPs are extremely uncommon before the menarche and after menopause. In this case, hormonal changes associated with puberty may have been a predisposing factor similar to our case. Other evidences that hormonal changes may play a role in the formation of FEPs are the presence of estrogen and progesterone receptors in the

stromal cells of FEPs, occurrence of these lesions in pregnancy, spontaneous regression after delivery and also in post-menopausal patients its association with hormone replacement therapy (12). According to Maenpaa et al, these lesions tend to exhibit greater cellular pleomorphism and atypia and recurrence may be seen more common when occurred in pregnancy (13). However, in our case, the patient showed no evidence of recurrence one year after the resection.

Although polygonal and multinucleate stromal cells are characteristics of FEPs, they can also be seen in normal vulva, vagina and cervix suggesting that these polyps may represent a proliferation of cells normally found in this region. FEPs represent a hyperplastic process involving the subepithelial myxoid stroma of the lower female genital tract rather than a true neoplasm. In summary, FEPs of the vulvovaginal region are benign lesions that have a wide range of morphologic appearances and may be misinterpreted as malignant. In the present case, pregnancy may have been a predisposing factor for the development of this FEP.

## Gebeliğin erken döneminde vulvar fibroepitelyal polip olgusu

### Özet

*Vulvovajinal bölgenin fibroepitelyal stromal polipleri sık karşılaşılan tümörler olmasa da klinik özellikleriyle malign tümörlerle karıştırılabilir. Çok farklı morfolojik görüntüleri nedeniyle sıklıkla kesin tanı için biopsi gereklidir. Otuz sekiz yaşında, 9 haftalık gebeliği olan hastada sol labiumda lokalize 15 cm polipoid kitle izlenmiştir. Kitleye total cerrahi eksizyon uygulanmıştır. Histolojik olarak, hiperselüler miksoid stroma içinde tipik mezenkimal stellat, iğ şekilli çok çekirdekli dev hücreler gözlenmiştir. Olguda, klinik ve immunohisto kimyasal bulgular, vulvar bölgenin fibroepitelyal stromal polipi ile uyumlu bulunmuştur. Hastanın gebeliği sorunsuz ilerlemiş, komplikasyonsuz normal doğum gerçekleştirilmiştir. Rezeksiyondan bir yıl sonra hastada nüks izlenmemiştir. Vulvada izlenen bu lezyon, gebelikle birlikte görülebilen dev fibroepitelyal stromal polip olarak değerlendirilmiştir.*

**Anahtar kelimeler:** Dev fibroepitelyal stromal polip, vulva, gebelik

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