# Vulvar Cavernous Hemangioma: Case Report

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Vascular tumors of the female genitalia are unusual. Hemangiomas are benign tumors of the blood vessels. Usually they are asymptomatic and may be quite small. Histologically they are characterized by the endothelial cells and varying amount of supporting tissue. In this study a reproductive age woman who had symptomatic vulvar cavernous hemangioma is discussed.

**Key Words:** Female genitalia, Cavernous hemangioma

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## Introduction

Although the soft tissue tumors are common in reproductive aged women, the vascular anomalies are quite rare in the lower genital tract. As per the recent changes in terminology approved by the ISSVA (International Society for the Study of Vascular Anomalies), the vascular anomalies called as hemangioma previously are classified as the true hemangioma and vascular anomalies based on the physical findings, clinical behaviors, histological findings, and cell kinetics.[1,2] While the true hemangiomas are characterized with pre-puberty spontaneous regression, the most of the vascular anomalies observed in the adults are in the vascular malformation group.[3] The permanent vascular anomalies are split in sub-groups called as arterial, venous, capillary, lymphatic, and mixed types. The most frequently observed one of them is venous malformation called as cavernous hemangioma.[4]

## Case Report

A patient in reproductive age 32 years old, with gravity 1 and parity 1 has applied to out patient clinic with the complaint of the painful mass existed on the right labium majus for 5 years and observed that its size has been increased for 2 years and cosmetic problem. It was assessed as lymphangioma as a result of pathological analysis from the vulvar biopsy for the patent who had applied the polyclinic with the same complaint 2 months before this application. No pathology has been detected in the bimanual pelvic examination. The laboratory results and supra-pubic pelvic ultrasonography has been assessed as normal. The excisional biopsy has been performed for the patient on three 1x0.5 cm masses by entering with one vertical incision in 3 cm on the inferior of right labium majus under spinal anesthesia (Figure 1).

*Figure 1: Preoperative appearance of the mass*

The pathological examination result of the material has been reported as cavernous hemangioma. In microscopic examination, it has been observed that the enlarged vessels filled with blood in subcutaneous adipose tissue are arranged randomly and the irregular limited tumoral structure. It has been observed that the blood vessels are furnished with flattened

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endothelia and their walls are significant. Mononuclear inflammatory cells have been detected in limited numbers in the stroma (Figure 2-3).

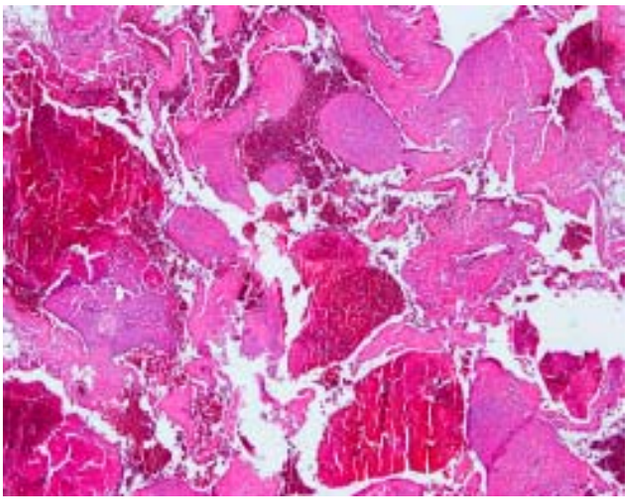

*Figure 2: Microscobic appearance of the mass (HE, x50)*

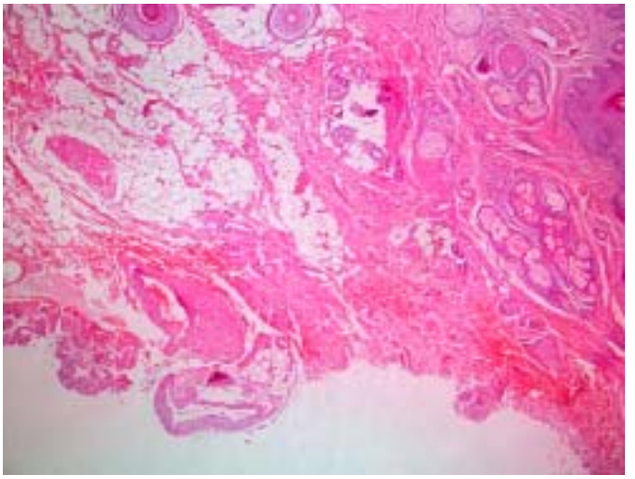

*Figure 3: Microscobic appearance of the mass (HE, x50)*

The patient whose the postoperative follow-ups are normal on her first day has been discharged from the hospital by suggesting antibiotic, anti - inflammatory, eau de goulard solution and medical dressing for anti-edema purposes. No pathological finding has been detected in the control of 2nd month.

## Discussion

The venous malformations had been called as the cavernous hemangioma in the past. This new terminology system is based on the results of biological studies which separate the true hemangiomas (neoplasia) from the vascular malformations according to the clinical appearance, pathological findings, and special biological behaviors, and that were published by Mulliken and Glowacki in 1982. Unlike the hemangiomas, the venous malformations have stationary epithelium. Also they are considered as dysmorphic vessels and developmental defects such as cannot stretch, being on persist for years sometimes or increasing progressively.

The venous malformations are lesions which cannot be distinguished at early ages generally and become symptomatic at late childhood or early adulthood ages. In venous malformations rapid progress can be formed by trauma, thrombosis, infection, and hormonal changes. The venous malformations have been rarely reported in female lower genital system.[6-9] Since the hemangioma diagnosis which is the former terminology is used in the literature, it is not possible to reach reliable incidence data related with the venous malformations in female lower genital system. The physiological hormonal changes can provoke the symptoms such as abnormal bleeding, pain, and swelling in venous malformations.

The cases with the vulvar venous malformations are generally asymptomatic and they are often not noticed in the diagnoses. There are no specific clinical presentations of these lesions. Small nodules, slight stress, pain, and discomfort can be detected in the routine gynecological examination as in our case. The clinical findings can be in a way that varying from large unilateral vulvar masses which may causes distortion in perineum to the small nodules and swellings.[10-12] The lesions can be located on unilateral labium minor as well as can close whole perineum. These vascular malformations are generally observed in births and they do not disappear but they grow progressively after the puberty and are seen in postmenopausal women. The clinical walkthrough and assessment give clue for making diagnosis.

Due to the superficial localizations in vulvar masses the radiological assessment is often unnecessary. Doppler ultrasonography can be useful for distinguishing venous malformations from high flow masses for rarely seen large lesions. The Magnetic Resonance Imaging can be used to define the lesion limits. It can be used to implement the therapeutic procedure such angiography and embolization.[13-15]

Besides, varicosities, nevus, melanoma, endometriosis, cyst of bartholin, and vulvar malignancies can rank among the diagnosis.[16] If there are not any significant symptoms on the benign lesions in many cases there is no need for treatment. However in cases with progressively developed lesions and in old women, the pathological diagnosis is required to ostracize the underlying malignity. At this point, if the clinical imaging is atypical in superficial localized small lesions then it the biopsy can be indicated. The biopsy which was performed rashly results in catastrophic hemorrhage probably in epidemic and large venous malformations. Some authors did not define the use of sclerotherapy. However the severe adverse effects such as intense pain, tissue necrosis, and nerve injury have been reported related with sclerotherapy implementation.

It is reported that the ideal approach for the treatment of massive vulvar lesions is the application of embolization and surgical treatment as combined in a study published by Shu wang et al, in 2008.[17] While the intraoperative embolization reduces the risk of enhanced blood loss by blocking the blood stream to the vessels, the surgical treatment is applied as curative procedure. On the other hand the ablative postoperative reconstructive studies assist the protection of cosmetic appearance of perineum.[18]

The surgical excision can be used to reach the definitive pathological diagnosis or in the repetitive cases following the simple embolization. We should be more careful for the large malformations of lower genital system. In such cases the surgical treatment combined with the preoperative embolization can be curative and reliable.

As a consequence, the venous malformations are the rarely seen lesions in female genital system which are required to be treated when they causes symptoms such as swellings, pains, and stress and cosmetic problems.

## Vulvar Kavernöz Hemanjiyom: Olgu Sunumu

Kadın genital sisteminde vasküler tümörler nadir görülür. Hemanjiyomlar kan damarlarının benign tümörleridir. Genellikle asemptomatik ve oldukça küçüktürler. Histolojik olarak endotel hücreleri ve destek dokudan oluşurlar. Bu çalışmada reprodüktif yaşta semptomatik kavernöz hemanjiyom saptanan bir olgu sunularak tartılmıştır.

**Anahtar Kelimeler:** Kadın genitali, Kavernöz hemanjiyom

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