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Case Report

Pedunculated Vulvar Hemangioma: A Rare Case Report

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Abstract

Hemangiomas are one of the most common benign soft tissue tumors. Vascular tumors of the female genitalia are unusual and pedunculated vulvar hemangiomas are extremely rare. Usually they are asymptomatic and quite small in size. Here we report a rare case of pedunculated vulvar hemangioma in a 46 year old patient who presented in the gynecology department with a painless mass in vulva for duration of 2 years.

Keywords: Vulvar hemangioma, pedunculated hemangioma.

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Introduction

Hemangiomas are the most common benign soft tissue tumor of infancy and childhood. They are characterized by increased endothelial cell turn over. Sixty percent of hemangiomas are located in the cervicofacial region and more common in females than males [1]. The remaining portion can occur at various locations in the body including vulva, which is very rare. Although rare we must be aware of the hemangiomas in female genital tract. Hemangiomas are generally harmless but they may cause some complications. Rupture due to rapid growth and bleeding are the serious complications. We report a rare case of a pedunculated vulvar mass which was diagnosed as hemangioma in histopathology. To the best of our knowledge this is the first case of pedunculated hemangioma vulva.

CASE REPORT

A 46 year old female patient with parity 2 who presented with painless mass on labia majora of 2 years duration in gynecology department. There was no history of any bleeding manifestations or ulcerations or rapid increase in size. Ultrasonography of labia majora shows a pedunculated 5x3.4cm well defined iso to hypoechoic lesion involving the deep subcutaneous fat plane of labia majora, possibilities of lipoma or vascular

tumor. We received the excision specimen of the pedunculated mass with overlying portion of skin measuring 6x7x 4.5cm. Cut section of which identified a fairly circumscribed light brown lesion measuring 4x3.5x3cm (Fig 1). Microscopy showed a fairly circumscribed neoplasm composed of proliferating small capillary sized vessels lined by flattened endothelium. The features were favouring hemangioma (Fig 2-4). The post-operative period was uneventful and there is no recurrence of the lesion till now.

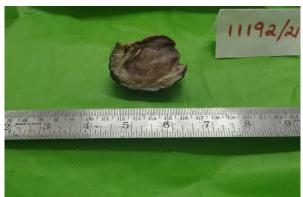


Fig-1: Cut section of pedunculated mass-fairly circumscribed light brown lesion

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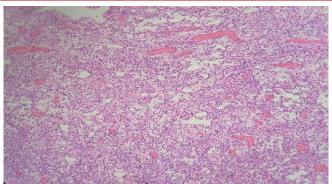


Fig-2: 4x view showing proliferating small capillary sized vessels

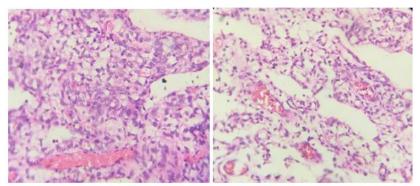


Fig-3 and 4: 10x and 40 x view of capillary sized vessels lined by flattened endothelium respectively

DISCUSSION

The word hemangioma comes from Greek word, hema – 'blood', angeio- 'vessel, 'oma -tumor. In 80% of cases, hemangiomas occur as single lesions. Vascular lesions are the most common congenital abnormality and the most common site includes head and neck. Pathogenesis and origin of hemangioma remain incompletely understood. Various theories have been proposed. Aberrant and focal proliferation of endothelial cells results in hemangioma. Most of them regress spontaneously. Vulvar location as in our case is extremely rare. Only very few literatures are available. The histopathological diagnosis is important in distinguishing hemangiomas from other non-vascular tumors.

Benign vascular tumors were classified as: 1) According to the type of fluid contained as hemangioma and lymphangioma and 2) According to the size of the vascular channels as capillary (small diameter vascular channels) and cavernous (large diameter vascular channels). Mulliken and Glowacki described a biological classification based on endothelial cell characteristics, physical findings and natural history that differentiates vascular lesions with endothelial proliferation (hemangioma) from lesions with structural anomalies (vascular malformations). International Society for the Study of Vascular Anomalies (ISSVA) differentiates vascular tumors from vascular malformations based on their clinical appearance, radiological features, pathological features and biological behaviour [2] (Table 1).

Table-1: Modified International Society for the Study of Vascular Anomalies (ISSVA) classification

Table-1. Woulded international Society for the Study of Vascular Anomalies (195 v A) classification	
Vascular tumors	Vascular malformations
Infantile hemangiomas	Slow (low) flow
Congenital hemangiomas	- Capillary malformations
- Rapidly involuting	- Port wine stain
- Non involuting	- Telangiectasia
- Partially involuting	- Angiokeratoma
Tufted angioma	- Venous malformations
Pyogenic granuloma	- Lymphatic malformation
 Dermatologic acquired vascular tumors Kaposiform hemaangioendothelioma Spindle cell hemangioendothelioma Hemangioendothelioma NOS 	 Fast (high) flow Arterial malformation Arteriovenous fistula Arteriovenous malformation Complex combined vascular malformations

The pattern of treatment in hemangioma depends upon the nature of the mass. Childhood hemangiomas usually resolve spontaneously, treatment may be reserved for those lesions of functional or psychological concern [3]. To distinguish vulvar hemangiomas from other non-vascular tumors methods such as CT, MRI could be used before excision. Treatment options include microembolization, radiation, cryotherapy, sclerosing agents and excision. In the present case, excision was done as the patient had progressive increase in size of the mass for the two years.

CONCLUSION

In conclusion, our case is noteworthy for its detection of a pedunculated hemangioma in the vulvar region which is unusual for the site and nature. Patient had progressive increase in the size since two years. On ultrasound, features were suggestive of a vascular tumor or a lipoma. Hence surgical excision was done.

Currently the patient is on follow up and no sign of recurrence has been seen.

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