

CAVERNOUS LYMPHANGIOMA OF THE PREPUCE

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ABSTRACT

We report a rare case of a benign vascular tumor of the prepuce (cavernous lymphangioma) in a young man. Because of its location, it may be misdiagnosed as a far more common cystic lesion of the penis (median line cysts, muroid cysts or epidermal cysts). This entity should be considered in the differential diagnosis of preputial masses.

Key words: penis; penile neoplasms; lymphangioma.

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INTRODUCTION

The described vascular lesions of the penis are hemangioma, angiokeratoma, venous lakes, angiolymphoid hyperplasia and lymphangioma. We report on a case of an unusual benign lymphatic tumor of the prepuce.

CASE REPORT

A 20-year-old man presented with a soft lesion in the dorsal area of the prepuce. He did not complain of any other urological symptom. The medical history was unremarkable and the physical examination showed a soft fluctuant mass with liquid content in the dorsal aspect of the prepuce.

Under local anesthesia, the patient underwent a circumcision because of the impossibility to resect the lesion (Figure-1). The macroscopic examination of the specimen showed a multicystic lesion with fine walls. Microscopic study revealed a vascular proliferation containing acellular material without any hematological elements (Figure-2). These findings were concordant with the diagnosis of cavernous lymphangioma.

DISCUSSION

Lymphangiomas are relatively rare tumors. In fact, it is difficult to state the nature of lymphangiomas as true tumors, hamartomas of lymphangiectasia. Nowadays, lymphangiomas are considered lymphatic malformations not communicated with the lymphatic system. Incidence is slightly higher in males, and the time of appearance is mainly in childhood, and in general before the second year of life, although some cases have been described in adults.



Figure 1 - Macroscopic appearance of cavernous lymphangioma after circumcision. Note a soft mass in the dorsal aspect of the prepuce.



Figure 2 - Vascular proliferation in the subcutaneous connective tissue of prepuce resembling a multicystic or cavernous lesion, with acellular content and fine walls covered by endothelium (HE, X50).

Lymphangiomas are ubiquitous because of the universal distribution of the lymphatic system, but the most common affected sites are head, neck and axilla. Occasionally, they can occur in deep organs such as lung, digestive tube, spleen, liver and bone. Lymphangiomas have been classified in three groups: 1)- lymphangioma simplex or capillary lymphangioma, composed of small thin-walled lymphatics; 2)- cavernous lymphangioma, with large lymphatic vessels; 3)- cystic lymphangioma or cystic hygroma, major lymphatic dilations lined with collagen and smooth muscle, frequently diagnosed in newborns (1).

Cavernous lymphangiomas are often detected in mouth, lips, cheek, tongue and other areas with dense connective tissue and muscle, both allowing

their expansion. They have also been denominated deep cutaneous lymphangiomas because of their origin in the deep dermis (2). Two cases of lymphangioma have been previously described in a genital location: the glans of the penis, scrotum and retropubic space were affected, and treatment was laser fulguration (2,3). The treatment of these lesions must be individualized, specially according to their location. Laser fulguration or local surgery are appropriate choices.

To our knowledge, this is the first case ever reported of a cavernous lymphangioma of the prepuce. Hence, this entity must be considered as another element in the differential diagnosis of preputial masses together with the other cystic lesions of the penis (median line cysts, mucoid cysts or epidermal cysts).

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