Case Report

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Primary cavernous hemangioma of the glans penis with balanitis xerotica obliterans: a case report

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ABSTRACT

The uniqueness of this case is in its rarity and divergent presentation. Here, we report a case of 61 years old diabetic male who presented with painless swelling on the glans penis for the past 6 months along with bleeding from the mass and difficulty to pass urine for 1 month. Examination revealed solid, mass arising from the tip of glans with non-retractile, indurated prepuce. No clinically palpable lymphadenopathy was present. Dorsal slit was performed and mass excised. Histopathology examination revealed cavernous hemangioma. Primary cavernous hemangioma of glans penis is very rare but challenging for urologists to diagnose and manage such cases.

Keywords: Primary cavernous hemangioma of the glans penis, Balanitis xerotica obliterans, Case report

INTRODUCTION

Vascular lesions of the genitalia are uncommon without a consensus on classification, cause, and treatment. These deformities include hemangiomas and vascular malformations. Subcutaneous hemangiomas, also referred to as cavernous hemangiomas, are much less common than the cutaneous variety. Here, we report a case involving the surgical excision of a mass of the glans penis that was diagnosed as cavernous hemangioma.

CASE REPORT

Sixty-one years old diabetic male presented with painless swelling on the glans penis for the past 6 months along with bleeding from the mass and difficulty to pass urine for 1 month. Examination revealed solid, mass arising from the tip of glans with non-retractile, indurated prepuce. Meatus was not identifiable. There was no

clinically palpable lymphadenopathy. Patient did not have any surgical intervention in the past.

The haemoglobin was 10.2 gm/dl, total count-8700, blood urea 41 mg/dL and serum creatinine 1.3 mg/dL. Coagulation profile was within normal range. Viral profile was negative. Urine examination revealed 10-12 WBC/Hpf with no growth of colony on urine culture. Ultrasound evaluation showed normal sized kidneys with diffuse urinary bladder wall thickening and post void residual urine of 160 ml. Initially, patient was managed with dorsal slit and examination under local anaesthesia. Examination findings include solid mass, approx. 3x3 cm, arising from glans penis, encircling it up to corona, meatus wasn't visible. Excision of the mass (partial amputation of distal one third of the penis) was performed. Histopathological examination showed cavernous hemangioma involving glans penis with balanitis xerotica obliterans involving preputial skin. Patient is on follow-up for any recurrence of the disease.



Figure 1: Pre-operative photograph.



Figure 2: Intra-operative photograph.

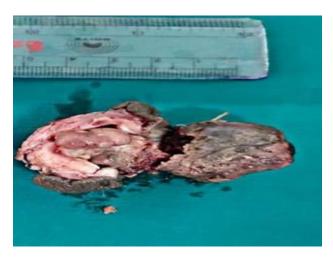


Figure 3: Post-operative specimen.

DISCUSSION

Congenital hemangiomas affect the genitalia in approximately 1% of all hemangiomas. There are various theories describing its origin and the mechanisms regulating their growth and involution. However, Origin from proliferation of immature capillary vessels is widely accepted. Cavernous hemangioma may be detected at birth or later in life. In contrast to cutaneous hemangiomas, which tend to involute, cavernous hemangiomas tend to enlarge gradually and should be treated with care. Ultrasonography with color Doppler imaging, computed tomography (CT), or MRI is recommended to delineate the size of the hemangioma because examination does not disclose the extent of the lesion.³ Various treatment modalities have been described in literature like excision, neodymium-doped yttrium aluminium garnet (Nd YAG) laser and sclerotherapy using 1-3% polidocanol or 3% sodium tetradecyl sulphate. 4,5 Definitive treatment by en bloc resection is preferred in large masses like in our case.

CONCLUSION

Primary cavernous hemangioma of glans penis is very rare benign neoplasm. Sometimes it may mimic penile cancer. However, it carries good prognosis.

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