Primary Kaposi's Sarcoma of Glans Penis in an HIV Negative Patient: Case Report

HIV Negatif Erkek Hastada Glans Penisin Primer Kaposi Sarkomu

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ABSTRACT Penile malign neoplasms are rarely seen and less than 1% of men malignities. Kaposi's sarcoma (KS) was described by Moritz Kaposi in 1872 firstly. Penile KS is very rare and associated with HIV positive patients. First case of penile KS was reported in 1902. Differential diagnosis includes pyogenic granuloma, histiocytoma, hemangioma and angiosarcoma. Local surgical excision, cryotherapy, electrosurgery, chemotherapy, laser therapy, radiation therapy, interferons and, photodynamic therapy are the treatment modalities of KS. We presented a case of penile KS who was treated with surgical excision. KS should be kept in mind for nonspecific penile lesions by physicians.

Key Words: Non-AIDS-related Kaposi sarcoma; penile neoplasms; HIV

ÖZET Penisin malign tümörleri oldukça nadir görülmekte olup erkek malignitelerinin yaklaşık %1'ini oluşturur. Kaposi Sarkomu (KS) ilk olarak 1872 yılında Moritz Kaposi tarafından tanımlandı. Penil KS oldukça nadir görülmekte olup HIV pozitif hastalarla ilişkilidir. İlk penil KS olgusu 1902 yılında bildirilmiştir. Ayırıcı tanıda piyojenik granuloma, histiyositoma, hemanjioma ve anjiosarkoma yer alır. Cerrahi eksizyon, kriyoterapi, elektrocerrahi, kemoterapi, lazer tedavisi, radyoterapi, fotodinamik tedavi ve interferon tedavileri KS'nun tedavi seçeneklerini oluşturmaktadır. Cerrahi yolla tedavi ettiğimiz olgu bu yazıda sunulmuştur. Nonspesifik penis lezyonlarında KS akılda tutulmalıdır.

Anahtar Kelimeler: AIDS-ilişkili olmayan Kaposi sarkomu; penil tümörler; HIV

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Kaposi's sarcoma (KS) was described and called Idiopathic Multiple Pigmented Sarcoma by Moritz Kaposi in 1872 firstly.[1] Kaposi's sarcoma is a vascular inflammatory tumor that presents on skin and extremites occurs frequently in immunosuppressive patients like transplanted and Acquired Immune Deficiency Syndrome (AIDS) patients.[2] It frequently occurs in mucocutaneous sites, skin of the lower extremites, face, trunk, genitalia and oropharyngeal mucosa.[3] Primary presentation of KS on penis is uncommon situation and more often observed in AIDS patients.[4] Kaposi's sarcoma is categorized into four forms; classic, endemic, iatrogenic and AIDS-associated.[3] We present a case of KS with penile localization in Human Immunodeficiency Virus (HIV) negative patient.

CASE REPORT

A 60 year-old circumcised male presented with an asymptomatic reddish nodular lesion on the glans penis for two months. The lesion was 1x0.5 cm in size (Figure 1). Enlarged lymph nodes were not detected in physical examination. Patient was well with no history of immunsuppresive drug intake, systemic illness or organ transplantation. There was no other skin and mucosal lesions. The patient was heterosexual with no history of sexually transmitted diseases. Laboratory investigations were normal. HIV test was negative. After the first test, the test was repeated. The result was negative. Abdominal ultrasonography showed no pathology. The lesion was excised and histological examination confirmed the diagnosis of KS. Proliferation of tumor cells with spindle nucleus was seen in microscopical examination (Figure 2). Immunohistochemical examination was performed (Figure 3). Human Herpesvirus 8 (HHV-8) and CD 34 were positive. No recurrence was detected in the following 6 months of the follow up period.

DISCUSSION

Penile malign neoplasms are rarely seen and less than 1% of men malignities.[2] Squamous cell carcinoma is almost 95% of penile neoplasms. Basal cell carcinoma and lymphoma are other malignites. Penile KS is very rare and associated with HIV positive patients.[5]

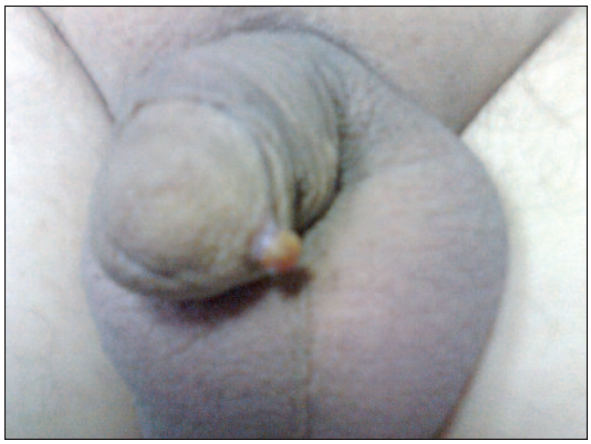

FIGURE 1: Localization of the lesion.
(See for colored form http://uroloji.turkiyeklinikleri.com/)

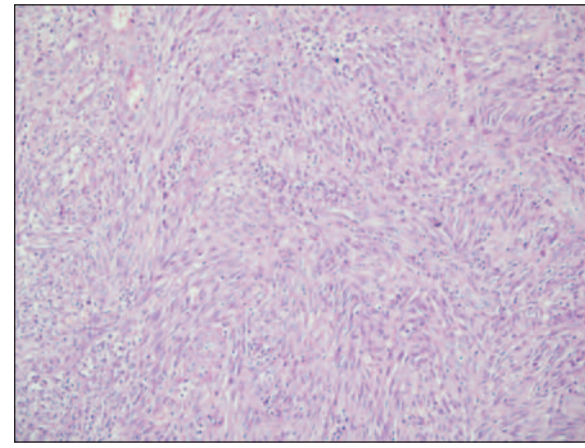

FIGURE 2: Pathological evaluation with hematoxylin-eosin (40x magnification).
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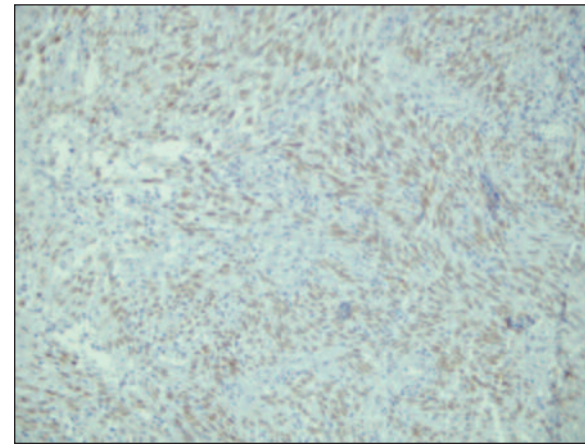

FIGURE 3: Immunohistochemical study of Human Herpesvirus-8. Spindle cells are seen with 40x magnification.
(See for colored form http://uroloji.turkiyeklinikleri.com/)

Kaposi's sarcoma can be classified into four groups: classic, endemic, iatrogenic and AIDS-associated.[3] The classsic form is frequently observed in elderly male patients of Mediterranean origin and Ashkenazi Jews with affecting more often the lower limbs and feet rarely visceral involvement. Prognosis is good in classic form. Endemic form has a few subgroups.[1] The incidence increases with the age. The worst prognosis is seen in this form. Iatrogenic form can be seen after months (mean 16 months) in immunsupressive treatment patients. The lesions can spontaneously regress after stopping the treat-

ment. This form is more aggressive than classic form and can be fatal with gastrointestinal hemorrhage. AIDS-associated form is seen both earlier age than classic form and reported in children.

Kaposi's sarcoma occurs primarily on the extremites.[3] Primary penile KS is uncommon in HIV negative men. Penile lesions usually present as single reddish-purple to bluish nodules.[4] The less common presentations are multiple papules, plaques, nodules, wart like and pedunculated lesions. Glans penis is more common localization than foreskin, coronal sulcus, frenulum and urethral meatus on the penis.[5] Our patient presented reddish nodular lesion that located on glans penis.

Differential diagnosis includes pyogenic granuloma, histiocytoma, hemangioma and angiosarcoma.[4] Biopsy is necessary for diagnosis. Histopathological findings of penile KS is similar that of KS located at another anatomic skin sites.[6] These findings are blood filled slit like spaces, pleomorphic spindle cells with frequent mitoses, extravasated erythrocytes, hemosidrin laden macrophages and cellular infiltrate by lymphocytes and plasma cells.[7] CD34 antibody can be used for immunohistochemical staining.[3] In the pathological evaluation, proliferation of tumor cells with spindle nucleus was seen and CD34 and HHV-8 were performed. This immunohistochemical studies were positive in our case.

The pathogenesis of KS is still uncertain. Chang and colleagues identified DNA fragments of a herpesvirus, which has been called Kaposi's sarcoma-associated herpesvirus (KSHV, also known as human herpesvirus 8 (HHV-8) in a Kaposi's sarcoma skin lesion from a patient with AIDS in 1994.[8] Recent studies showed an association between KS and HHV-8.[5] Other predisposing factors are gender, genetic susceptibility, immunosuppression and cytokin activation.[4]

Treatment modalites of KS are local surgical excision, cryotherapy, electrosurgery, chemotherapy, laser therapy, radiation therapy, cytostatic agents, alpha and beta interferon, photodynamic therapy and topical therapy in form of nitrogen mustard or imiquamod.[9] Surgical excision is appropriate for small and single lesions.[3] Local recurrence is rare after complete excision. Relaps can occur after six months to two years after the procedure. Surgical excision was performed for diagnosis and treatment in our patient. Surgical margins were negative and the local recurrence was not seen in the 6 months follow-up.

In this report we aimed to present a penile KS in HIV negative patient. Kaposi's sarcoma is a rare entity in urology practice. Penile KS is an uncommon disorder in HIV negative patients. Kaposi's sarcoma should be considered when treating nonspecific penile lesions. Surgical excision is appropriate both diagnosis and treatment.

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