

Isolated Kaposi's sarcoma of the penis in a HIV negative patient

Mehdi Benna¹, Molka Chamlali¹, Asma Sassi², Sarra Seghaier¹, Raoudha Doghri², Monia Hechiche¹, Jamel Ben Hassouna¹, Khaled Rahal¹

¹(Departement of surgical oncology, Salah Azaiez Institute, Tunisia)

²(Department of pathology, Salah Azaiez Institute, Tunisia)

Abstract : Kaposi's sarcoma is a malignant proliferation usually occurring in HIV positive patients. In the classic form, the penile localization is usually associated with a diffuse disease. We report a 75 year old HIV negative patient with an isolated penile Kaposi's sarcoma treated by surgery.

Keywords: Kaposi sarcoma, Penis, HIV, Surgery, HHV8

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I. Introduction

Kaposi sarcoma (KS) is a neoplasm of the endothelial cells. It's subdivided in four subtypes: the classic form, which is typical in Mediterranean countries and the central regions of Africa; lymphadenopathic, a form that occurs primarily in young African children; transplantation-associated, which particularly affects renal transplantation patients; and AIDS-related [1]. The classic form restricted to the penis is rare.

II. case report

A circumcised 75-year-old man with no past medical history presented to our consultation for two ulcerated lesions of the glans penis. The patient is a heterosexual with no past history of sexually transmitted disease. The lesions appeared 6 months ago. The patient was unsuccessfully treated by two courses of antibiotics. The ulcerations were measuring 7mm and 5 mm surrounded by smaller purplish macules. A strict systematical examination did not reveal any other skin lesions or inguinal adenopathy. Patient had a tumorectomy including the two lesions with a 2 mm free margin. The histopathological examination of the excisional biopsy displayed a spindle cell proliferation that formed slitlike spaces. Cells had ill-defined cytoplasmic borders with an elongated nucleus and no mitotic activity. There was an extravasation of erythrocytes with hemosiderin deposits (Fig1.). On immunohistochemistry, cells were positive for HHV8 antibody with an intense nuclear and granular immunostaining (Fig2). These findings were consistent with the diagnosis of a classical KS form of the penis. Thoracic and abdominal scan of the patient was normal. HIV serology was negative. After 12 months of follow-up, no recurrence was detected.

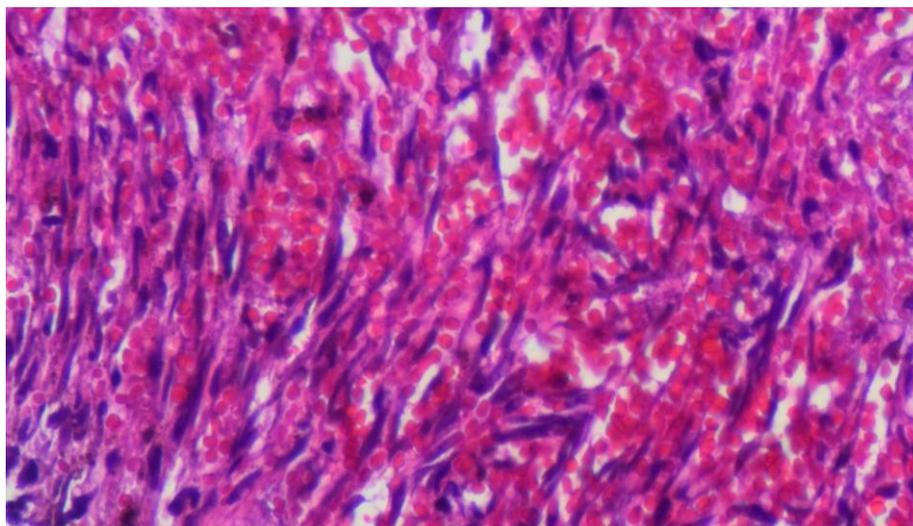


Fig1: Spindle cell proliferation with erythrocytes extravasation (HE x 400)

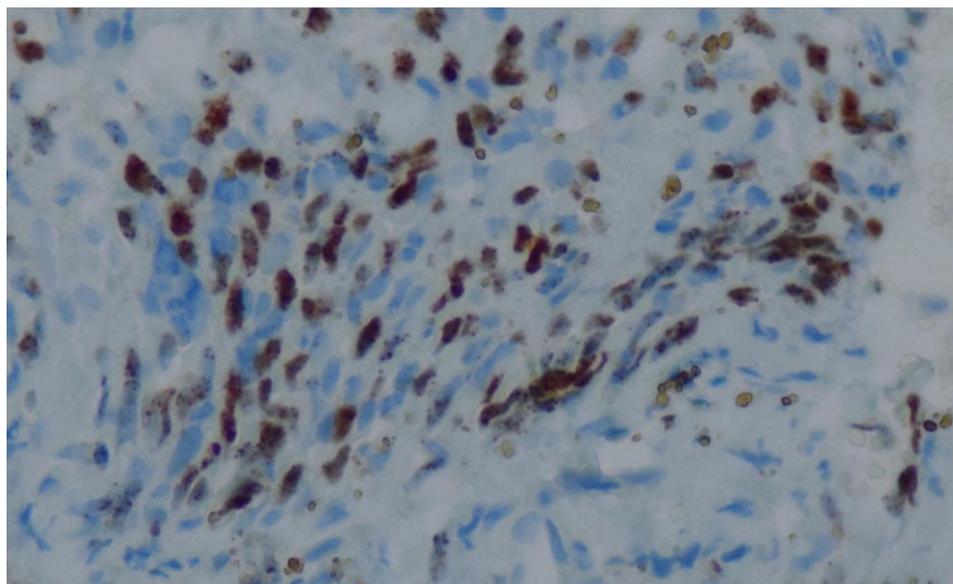


FIG2. HHV8 NUCLEAR AND GRANULAR POSITIVITY (X 400)

III. Discussion

Isolated Kaposi's sarcoma of the penis in HIV negative patient is rarely described in the literature [2-4]. In the mediterranean area, the classical phenotype of KS usually involves the lower extremities in patients in the six to the seventh decade of life [1]. The parts of the penis usually involved are glans penis, foreskin, coronal sulcus, frenulum and urethral meatus[5]. Involvement of the shaft is uncommon and associated with lesions in the glans or coronal sulcus[6].

Histopathological findings are the same as KS in the different epidemiologic KS types. Nevertheless, mitoses and cellular anaplasia are more common in HIV-negative patients. Ramifying proliferating vessels often surround larger ectatic vessels and skin adnexa, producing the promontory sign. KS lesions also contain several hemosiderin-laden macrophages. The differential diagnosis of KS includes many vascular tumors and some benign lesions such as granulomas. The best immunohistochemistry marker to help the pathologist to properly diagnosis th KS is the identification of HHV8 within lesional cells using LNA-1[7].

Many publications emphasize the strong correlation between HHV8 infection and KS. This was endorsed by the positivity of HHV8 in the tumoral cells and in the blood by serology. HHV8 is sexually transmitted virus in adults and non sexual in children by personal contact [1]. Recent papers have demonstrated that the saliva could be a source of spread of the disease[8].

Small lesions are usually treated with surgical excision. Radiotherapy instead is reserved of diffuse lesions. Other local therapies include intra-tumoral injection of chemotherapy, Alitretinoone gel application, physical destruction by laser, cryosurgery or electrocoagulation. Whereas systemic chemotherapy is employed for aggressive forms with good results[9]. On HIV negative patients, recurrence is rare. When present, it happens from 6 months to 2 years after the surgery [10].

IV. Conclusion

Isolated KS of the penis in a HIV negative patient is very rare and it is associated with HHV8 infection. Accurate diagnosis is challenging for both clinicians and pathologists. KS should be included in differential diagnosis of persistent penile lesion that resist to medical treatment.

References

- [1]. Morelli L, Pusiol T, Pisciole F, Höfler H, Weirich G, Werner M, et al. Herpesvirus 8-Associated Penile Kaposi's Sarcoma in an HIV-Negative Patient: First Report Of A Solitary Lesion. *The American journal of dermatopathology*. 2003;25(1):28-31.
- [2]. Kavak A, Akman RY, Alper M, Büyükbabani N. Penile Kaposi's sarcoma in a human immunodeficiency virus-seronegative patient. *British Journal of Dermatology*. 2001;144(1):207-8.
- [3]. Marguart E, Engst R, Oehlschlaegel G. An 8-year history of Kaposi's sarcoma in an HIV-negative bisexual man. *AIDS (London, England)*. 1991;5(3):346.
- [4]. García-Muret M, Pujol R, Puig L, Moreno A, De Moragas J. Disseminated Kaposi's sarcoma not associated with HIV infection in a bisexual man. *Journal of the American Academy of Dermatology*. 1990;23(5):1035-8.

- [5]. GÖnen M, Cenker A, Kiyici H, Kalkan M. Penile Kaposi's sarcomas in a circumcised and HIV-seronegative patient. *International journal of urology*. 2006;13(3):318-20.
- [6]. Micali G, Nasca M, De Pasquale R, Innocenzi D. Primary classic Kaposi's sarcoma of the penis: report of a case and review. *Journal of the European Academy of Dermatology and Venereology*. 2003;17(3):320-3.
- [7]. Radu O, Pantanowitz L. Kaposi Sarcoma. *Archives of Pathology & Laboratory Medicine*. 2013;137(2):289-94.
- [8]. Vitale F, Viviano E, Perna A, Bonura F, Mazzola G, Ajello F, et al. Serological and virological evidence of non-sexual transmission of human herpesvirus type 8 (HHV8). *Epidemiology & Infection*. 2000;125(3):671-5.
- [9]. Soufiane M, Fadl T, Nawfel M, Ouafae M, Kawtar Z, Afaf L, et al. Kaposi's sarcoma: HIV-negative man with isolated penile localization. *Indian Journal of Pathology and Microbiology*. 2010 July 1, 2010;53(3):535-6.
- [10]. Seleit I, Attia A, Maraee A, Samaka R, Bakry O, Eid E. Isolated Kaposi Sarcoma in two HIV negative patients. *Journal of dermatological case reports*. 2011;5(2):24.

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