CASE REPORT

Disseminated angiomatous lesions in HIV-seropositive patient

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Abstract

Kaposi's sarcoma is an uncommon malignant vascular neoplasm linked to human herpesvirus type 8 (HHV-8); it is a tumor characterized by proliferation of HHV-8-associated spindle cells and abnormal neo-vasculature. Although Kaposi's sarcoma has been described in immunocompetent subjects, strong inter-relationships with host immunity lead to higher prevalence in people living with human immunodeficiency virus (HIV). HIV infection has been historically associated with malignancies, such as Kaposi's sarcoma. Usually, it causes abnormalities that develop in tissues below the skin surface anywhere on the body or in mucous membranes of the mouth. Some authors have observed that malignancy is becoming a major cause of death among HIV-infected individuals in industrialized nations. In non-industrialized countries, profound weaknesses have been demonstrated in the diagnostic muscle of infectious diseases in general, with viral diseases being no exception. Treatment may consist of surgery, chemotherapy, or a combination of these treatment techniques. Combination of two or more of these treatment methods has become an important approach for increasing patient's chance of cure and prolonging survival. There are four clinical presentations: classic, endemic, associated with iatrogenic immunosuppression, and associated with acquired immunodeficiency syndrome.

This article presented a clinical case of an HIV-seropositive patient affected by disseminated angiomatous lesions, diagnosis, therapeutic options, and evolution.

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Case report

A 36-year-old male, with a history of tobacco use (10 cigarettes a day), sporadic use of cannabis and inhaled cocaine, reported having sexual relations with men and women, and a recent diagnosis of human immunodeficiency virus (HIV) infection with HIV viral load of 14,893 copies/ml and CD4 T lymphocyte count of 581 cells/µl, was consulted for raised violaceous plaque lesions with a rough and scaly surface on the lower eyelid of both eyes (Figure 1) and multiple violaceous papular lesions on the face, trunk, extremities, and on the hard palate. He was hospitalized with a diagnostic impression of angiomatous lesions under study. An upper digestive tract endoscopy was performed showing an extensive involvement of the esophagus and stomach with violaceous plaques (Figure 2). Microscopic biopsies of the skin lesions revealed normal thickness squamous epithelium and dermis occupied by a neoplastic lesion, characterized by spindle cells that defined slit-like spaces with erythrocytes inside, some of these extravasated (Figure 3). Complementary pathological and anatomical studies, including

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silver-methenamine, para-amino salicylic acid, Gram, and Ziehl-Neelsen tests were all negative.

Diagnosis and comments

Immunohistochemistry of herpesvirus type 8 and CD31 confirmed the diagnosis of Kaposi's sarcoma (Figure 3). It was decided to start antiretroviral treatment (ART) as a priority, consisting of tenofovir/emtricitabine 300/200 mg (TDF/FTC) and atazanavir/ritonavir 300/100 mg (ATZ/r), supported by a beneficial series of protease inhibitors boosted with ritonavir in order to reduce the rate of a relapse of Kaposi's sarcoma [5]. Ophthalmology assessment underestimated the usefulness of ocular sampling when finding more risks than benefits. Systemic chemotherapy with liposomal doxorubicin in 18 sessions was applied, achieving significant improvement in lesions at the time of the last possible medical control due to psycho-social barriers at eighth session (Figure 4). Differential diagnosis was established with bacillary angiomatosis.

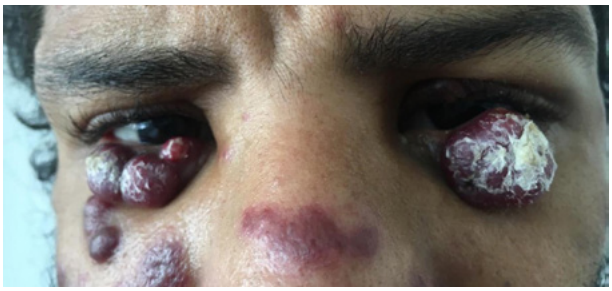

Figure 1. Multiple warty violaceous lesions affecting bilateral lower eyelids, and another "wine red" affecting the nasal bridge [Source: Latin American Research Team in Infectiology and Public Health archives – ELISAP, Medellín, Colombia]

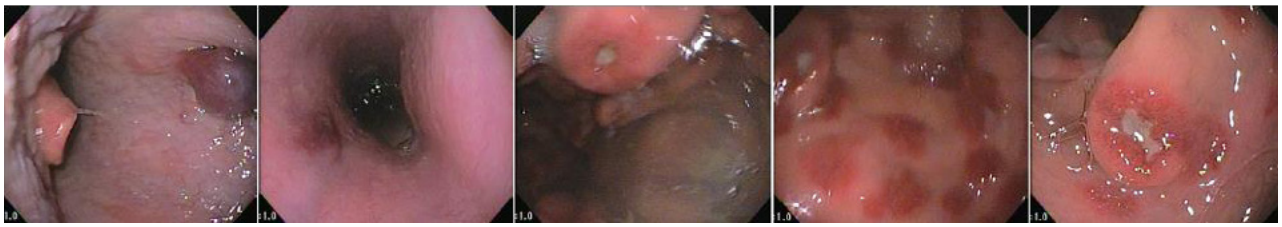

Figure 2. Invasion due to pattern lesions of Kaposi's sarcoma in the oropharynx, esophagus, and stomach [Source: Latin American Research Team in Infectiology and Public Health archives – ELISAP, Medellín, Colombia]

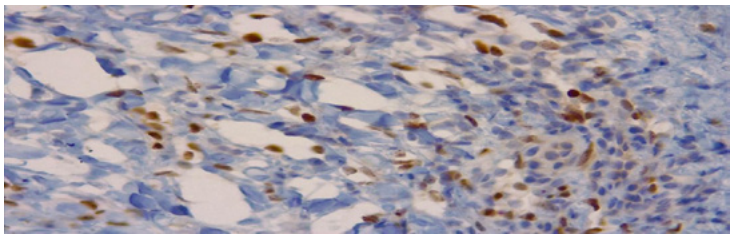

Figure 3. Nuclear positivity for Kaposi's sarcoma-specific HHV-8 immunohistochemistry [Source: Latin American Research Team in Infectiology and Public Health archives – ELISAP, Medellín, Colombia]

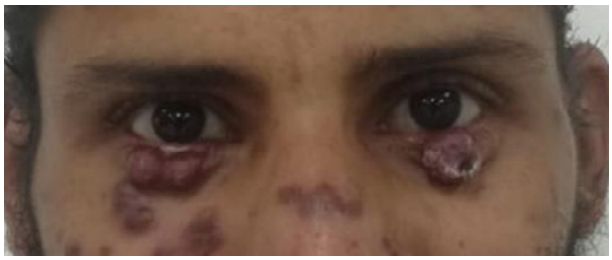

Figure 4. Slight improvement of the lesions after 8 of 16 proposed sessions [Source: Latin American Research Team in Infectiology and Public Health archives – ELISAP, Medellín, Colombia]

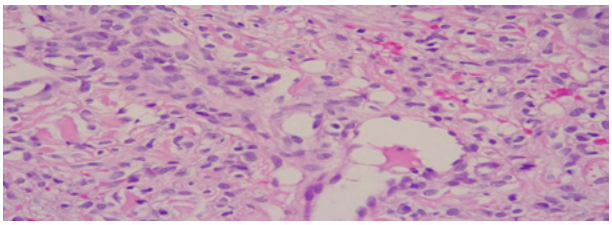

Figure 5. Hematoxylin-eosin x400. Dense spindle cell proliferation arranged in the form of bundles with abundant figures of mitosis [Source: Latin American Research Team in Infectiology and Public Health archives – ELISAP, Medellín, Colombia]

Since it is the second most common cause of angiomatous skin lesions in HIV-infected people, multiple lesions often show more than 1 morphological appearance, and mostly occur late in HIV-infected individuals with CD4 counts < 50 cells/mm^3 [1].

Kaposi's sarcoma is a neoplastic disease of vascular origin, favored by infection with the herpesvirus type 8 [2] (Figure 5). A significant prevalence is found among men who have sex with men [3], and is associated with HIV infection. The classic variant is the most frequent in this population, and constitutes a defining entity of acquired immunodeficiency syndrome (AIDS) in the chronic phase of the disease caused by HIV virus. It was a rare disease until the advent of HIV pandemic in the 1980s when its incidence raised steeply, and then gradually decreased due to the introduction of antiretroviral therapy (ART), particularly when protease inhibitors were introduced in 1990s [4]. The mainstay of the treatment of this infection is the establishment of combined antiretroviral therapy containing a protease inhibitor boosted with ritonavir or cobicistat [5]. Eventually, the addition of antineoplastic chemotherapy with anthracyclines or vinca alkaloids may be necessary, with Kaposi's sarcoma being a generally chemo-sensitive tumor [6].

Disclosures

1. Institutional review board statement: The study was approved by the Ethical Committee of Ethics Committee of La María Hospital, informed consent was filled.
2. Assistance with the article: None.
3. Financial support and sponsorship: None.
4. Conflicts of interest: None.

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