

Case Report

Kaposi's Sarcoma in HIV Positive Patient: Case Report

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ABSTRACT

Histology and pathology principles state that chronic inflammation and or chronic infections are known for causing cell displasias that may or may not progress to pre-malignant or actual malignant lesions. Even though Kaposi Sarcoma is not a prevalent issue among the Honduran community, healthcare providers have been struggling throughout the years when dealing with KS treatment and follow-ups due to public health limitations regarding chemotherapy access and actual medical specialists such as clinical oncologist and infectologist available across the north coast of the country. Thus, people must recur to private healthcare, which it is not affordable for the 65% of the entire Honduran population because you can find them below the poverty line, and 46% below the extreme poverty line. Being able to actually treat and follow a kaposi patient is considered a high privilege among the Honduran healthcare providers community. The following case-report describes the process of detection, course of treatment and follow-up appointments of a 44 year-old male patient at "Liga Contra el Cancer Honduras". Keywords: Kaposi Sarcoma; HIV; AIDS

INTRODUCTION

Kaposi's sarcoma (KS) is associated to a malignant neoplasiaaffecting mucocutaneous tissues, considered a multifocal angio proliferative vascular disorder described by Moritz Kaposi [1,2]. It's known for macules or plaques, indicating intermediate progression. Nodules are palpated on patients who have had it for a while [3,4]. Epidemiologically, four clinical presentations are recognized: classic, endemic, epidemic, and iatrogenic [1]. These have in common the human HerpesVirus type 8 (HHV-8) or Kaposi Sarcoma Associated with Herpes Virus (KSHV) [1],considered the main cause of all epidemic forms of KS [5] thanks to DNA sequences that have detected HHV-8 in all types of clinical presentations [1].

There's a 30-50% chance that an HIV-positive and HHV-8 positive patient will develop a kaposi's sarcoma [6]. Immunosuppression degree is key in determining development of KS virus, while survival varies depending on the extent of the disease, an estimated 5 years is 69%. During the first year the estimated survival is 90% for cutaneous condition and 70% for the visceral [7]. The fact of reducing immunosuppression

reduces the tumour in 50% of the cases, especially cutaneous forms [8].

Classic KS is considered a malignant neoplasia of spindle cells and endothelial origin, considered the most common form of this disease, which presents a clinical course with painless lesions of macular-type skin that appear red-brown or manifest as violet color also on head, neck, hands, and feet, as of painless papules extending towards upper and lower limbs. These are the most common sites of the classic KS. The organs mainly affected are skin of lower limbs and rarely, internal organs, so it's usually characterized by benignity [1-5]. Lesions do not itch. Oral lesions manifest as violaceous macules [9].

Population most affected is caucasian, especially men over 60 years old [10]. Classic SK has a ratio of 50 men for each woman. SK may occur at any time during course of HIV infection. A risk factor associated with SK is having two CD4+ counts below 200 cells/mm³ [11]. SK lesions appear asymptomatic and begin as macules, progressing to papules, plaques, and nodules [12].

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Iatrogenic KS is typically associated to immunosuppressive therapy in patients with organ transplantation or autoimmune disorders (Wegener's granulomatosis) [13].

Endemic SK is divided into two subtypes: one develops in middle-aged adults between 25 and 50 years old. The second develops mainly in children under 10 years; this form is known for generalized lymphadenopathy and has an aggressive clinical behavior with a survival of two years after its diagnosis [3].

Epidemic or associated to HIV KS occur mainly within homosexual population, being more susceptible at the moment of coitus due to the sexual activity of greater risk [4,5]. KS is the neoplasm most frequently associated with HIV/AIDS. During the 1980s, it was found in 40% of male patients suffering from AIDS in the US, with a special preference for homosexual men [14]. Friedman-Kienet studied 50 homosexuals previously healthy with KS. In their demonstration they were affected to lymph nodes, viscera, skin, and mucous membranes. In parallel, showed immunosuppression and opportunistic infections, syndrome known today as AIDS [15]. HIV-associated KS is multifocal involving skin, oral mucosa, lymph nodes, gastrointestinal tract, lungs, liver, and spleen [16,17].

This is the case of a patient with HIV/AIDS with KS with a complete response, who is currently stable. It is published to share the experience with health providers and to provide a quick update on current courses of treatment.

CASE REPORT

A 44-year-old mestizo male consults for treatment at "Liga Contra el Cancer Honduras", with disseminated dermatosis on face, peri-atrial region, neck, and abdomen characterized by high reddened converging lesions into plaques, acquiring violaceous color, 2 months prior to admission. HIV positive patient since 2012 on combivir (lamivudine 150mg+zidovudine 300mg) BID +Efavirenz 600mg daily. Physical examination: conscious, oriented, weight: 205 lbs, height: 1.71 m, BMI: 37.9, BP: 110/80 mmHg.

During initial examination, labs showed: WBC: 6.8 million/mm³, hematocrit: 42.8%, hemoglobin: 14.9 g/dl, absolute CD4+: 113 cells/mm³, blood glucose: 105 mg/dl, ESV: 26 mm/h. BUN: 10.8 mg/dl, SrCr: 0.8 mg/dl; AST: 16 U/L and ALT: 22 U/L. Chest x-ray: cryptogenic bilateral pleural effusion. UA: urobilinogen ++, bilirubin ++ (23/04/2012).

Cervical skin biopsy was performed. Surgical pathology reported skin ellipse measuring 3x2x1.5 cm, and on the epidermal surface, an elevated area measuring 1.5 cm diameter, without contact with the section edges. Histological sections and their levels show malignant vascular neoplasia within dermis, predominantly on the face, which are formed by bands of nodules. In addition, atypical spindle cells are identified, among which vascular spaces are upholstered by flattened endothelial cells. Some of them adopt lance forms with lesion-free borders, characteristic of nodular kaposi's sarcoma.

Starts chemotherapy with Paclitaxel 75 mg/m² and gemcitabine 1 g/m². Patient receives 6 cycles from April to August 2012. Patient was treated by oncology department "Liga Contra el

Cancer Honduras", showing good treatment adherence and medication tolerance, remarkable facial improvement and mild cervical lesion persistence. Patient showed excellent blood test follow-ups, for his absolute CD4+ count was 354 cells. He is currently on active antiretroviral therapy and is under surveillance with sessions scheduled for follow-up evaluations at "Liga Contra el Cancer Honduras" under complete remission of kaposi's sarcoma.

DISCUSSION

KS is also known as Kaposi's Angiosarcoma or multiple idiopathic hemorrhagic sarcoma. Being a systemic malignant angiomatosis, it has four variants of clinical presentation; Classical, endemic, epidemic and iatrogenic diseases described above. This case presents a case of epidemic or associated HIV-AIDS KS. At the global level, there is no universal consensus to standardize the therapeutic approach to it, however, there are multiple guidelines of clinical practice that essentially recommend under different levels of evidence the combined use of chemotherapy, localized radiotherapy and oral antiretroviral [18]. The course of the disease depends on the level of immunosuppression to which the patient is exposed and the low viral load present, since there is a greater susceptibility of such patients to develop HHV-8 or Kaposi Sarcoma-induced tumors associated with Herpes virus. The health service provider should correlate and stage the degree of severity according to the clinical manifestations, organs affected and degree of dissemination of KS to establish a therapeutic course [18]. As in the cases reported in Mexico, New Zealand, India and Spain, early detection and stratification in conjunction with adequate pharmacological and non-pharmacological management for its severity are the key to bring the patient to complete remission of KS [19,20]. The case reported here projects data of correct adherence to treatment with antiretroviral and chemotherapeutic agents.

CONCLUSION

We report the case of a 44-year-old man with HIV-associated Kaposi's sarcoma who presented good response and adherence to treatment after 6 cycles of chemotherapy. Although there is no standardized therapeutic approach for patients with KS, this case provides a favorable clinical experience, reaching the remission of kaposi's sarcoma that remains stable after the therapeutic intervention, being the systemic and local therapy of kaposi's sarcoma crucial to establishing control.

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DECLARATION OF CONFLICT OF INTERESTS

We hereby declare the complete absence of conflict of interests between all of the listed authors above and the building process of the case-report from its beginning to its completion.

This case is presented as a poster in 1. Bursa dermato genetic symposium with international participation.

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