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Extensive Kaposi's sarcoma in a Patient with Acquired Immunodeficiency Syndrome: Case Report

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ABSTRACT

Kaposi's Sarcoma (KS) is an angioproliferative neoplasm, the causative agent is human herpes virus 8 and the second most frequent tumor after non-Hodgkin lymphoma related to the human immunodeficiency virus (VIH). We present the case of a 40-year-old male with no history of chronic diseases, who began his condition with adenopathies in the bilateral inguinal region, adding a productive cough, lymphedema, and skin lesions with nodular characteristics and bleeding ulcers. A positive HIV test was reported, and a biopsy was performed, showing evidence of a spindle cell neoplasm compatible with KS. Laboratories with hemoglobin 8.3 mg/dL, platelets 239,000/uL, leukocytes 7.29/uL, glucose 76 mg/dL, creatinine 2.2 mg/dL, urea 80 mg/dL, albumin 1.69 g/dL, TGO 18 IU/L, TGP 5 IU/L, DHL 189 IU/L, viral load 283,259 copies and CD4 192 cells. Chest and abdomen computed tomography with evidence of pleural effusion, and multiple retroperitoneal and inguinal adenopathies. Starting concomitant retroviral treatment with liposomal doxorubicin, improving clinical status and laboratory parameters. HIV-infected people are at high risk of developing KS, early initiation of antiretroviral therapy, and maintenance of high CD4 cell counts are essential to reduce the incidence.

KEYWORDS: Sarcoma, Kaposi, Acquired Immunodeficiency Syndrome.

ARTICLE DETAILS

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BACKGROUND

The causative agent is Human Herpes Virus 8 (HHV-8)[1,2,3]. It is not a classic oncogenic virus, it comprises six main subtypes (A, B, C, D, E and F), which respond to immunological restoration when possible[2,4]. Infection with HHV-8 occurs through saliva through close contacts, blood, blood products, solid organ donation, and rarely by vertical transmission. It can infect several different cell types, including endothelial cells, B cells, epithelial cells, dendritic cells, monocytes, and fibroblasts[1,5].

Epidemic or human immunodeficiency virus-related KS is the second most common tumor after non-Hodgkin lymphoma. This variant is extremely aggressive, and the infection can date back 10 years. The decrease in CD4 T cells is a risk factor for developing it[6,7].

General considerations for the management of KS include the clinical variant, the extent and rate of tumor growth, the state of the immune system, and comorbidities[3,7]. A clinical case of a patient with extensive KS is presented.

CLINICAL CASE

40-year-old male patient with no history of chronic diseases. He began his condition with adenopathies in the bilateral inguinal region, adding a productive cough, lymphedema and skin lesions with nodular characteristics and bleeding ulcers (Fig. 1A). A positive HIV test was reported, and a biopsy was performed, showing evidence of a fusocellular neoplasm compatible with Kaposi's sarcoma, for which a simple tomography of the thorax and abdomen was requested (Fig. 1B,C), sputum with a negative acid-alcohol bacilli (AAB) test, laboratories with hemoglobin 8.3 mg/dL, hematocrit 25.2%, MCV 88.4 fL, platelets 239,000/uL, leukocytes 7.29/uL, glucose 76 mg/dL, creatinine 2.2 mg/dL, urea 80 mg/dL, albumin 1.69 g/ dL, TGO 18 IU/L, TGP 5 IU/L, alkaline phosphatase 89 IU/L, DHL 189 IU/L, viral load 283,259 copies, and CD4 192 cells.

Starting antiretroviral treatment based on dolutegravir/abacavir/lamivudine 50/600/300 mg every 24 hours concomitant with liposomal doxorubicin, improving

clinical status and laboratory parameters, being discharged after 15 days to continue monitoring.

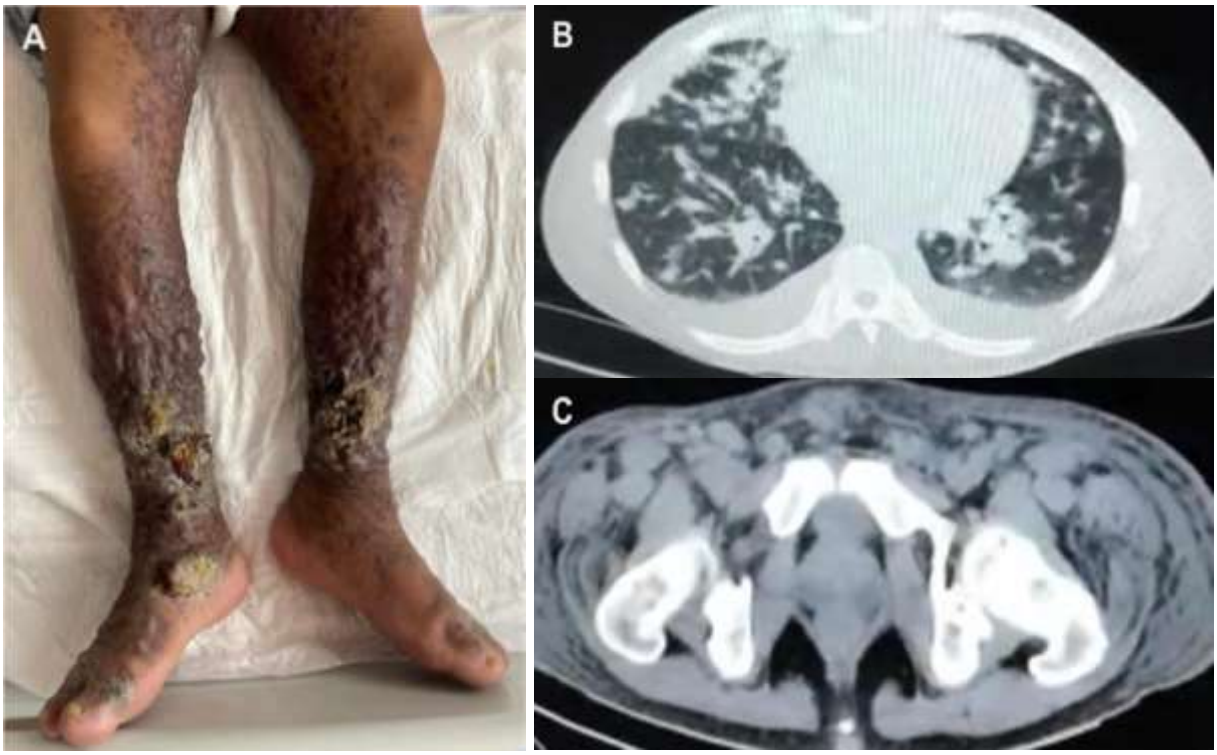

Figure 1. A) Confluent red-violet macules and papules with the presence of extravasation of blood and bilateral hyperperatosis,
B) Simple chest tomography with bilateral pleural effusion and multiple nodules,
C) Abdominopelvic simple tomography with the presence of multiple inguinal and retroperitoneal adenopathies.

DISCUSSION

People infected with HIV are at high risk of developing Kaposi's sarcoma[8]. Its development has even been reported in subjects with well-controlled infection and CD4+ T cell count >200 cells/µl; In addition, it remains to be seen whether they can produce additional changes in incidence as the co-infected population ages[9]. Lung involvement can cause dyspnea, dry cough, sometimes fever, and life-threatening hemoptysis. On computed tomography, the four most common signs include the presence of masses, nodules, thickening of the
bronchovascular tree, and pleural effusions[10].

Cochrane studies evaluating chemotherapy-based management with Highly Active Antiretroviral Therapy (HAART) show a significant reduction in disease progression without a statistically significant reduction in mortality or differences in adverse events such as immune reconstitution inflammatory syndrome[11]. Therefore, early initiation of HAART and maintenance of high CD4 cell counts are essential to reduce the incidence in populations at high risk of HHV-8 coinfection. While additional chemotherapy should be considered in severe cases with widespread disseminated disease[12].

CONCLUSIONS

It is important to increase awareness of Kaposi's sarcoma in its various presentations and to ensure appropriate treatment of affected patients.

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