HIV with initial ocular Kaposi sarcoma

HIV com sarcoma de Kaposi ocular inicial

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How to cite:
Pacheco AI. Human immunodeficiency virus with initial ocular Kaposi sarcoma. Rev Bras Oftalmol. 2024;83:e0013.

doi:
https://doi.org/10.37039/1982.8551.20240013

Keywords:
Kaposi sarcoma; Human immunodeficiency virus; Herpes virus; Neoplasms

Descritores:
Sarcoma de Kaposi; Vírus da imunodeficiência humana; Vírus da herpes; Neoplasias

Received on:
Feb 10, 2023

Accepted on:
Nov 14, 2023

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Conflict of interest:
no conflict of interest.

Financial support:
no financial support for this work.

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ABSTRACT

We present an interesting case of a 62-year-old black female, presented to the ophthalmological hospital with a little "nevus" on the left eye previously visualized at the mirror, with one month of development. Physical examination with slit lamp (biomicroscopy) showed a group of painless veins, with vascular redness, and a mass nodular aspect in the mid temporal bulbar conjunctiva, of approximately 2mmx4mm.

RESUMO

Apresentamos o interessante caso de uma mulher negra de 62 anos, que deu entrada no hospital oftalmológico com um pequeno nevo no olho esquerdo previamente visualizado ao espelho, com 1 mês de evolução. O exame físico com lâmpada de fenda (biomicroscopia) mostrou um grupo de veias indolor e vermelhidão vascular, com uma massa de aspecto nodular na conjuntiva bulbar temporal média, de aproximadamente 2mmx4mm.

INTRODUCTION

The Kaposi sarcoma (KS) is the most common ocular surface neoplasm in human immunodeficiency virus (HIV), and it was first described in 1872, characterized by the herpes virus 8, also known as KS, an opportunistic infection, when the amount of CD4 is below 200 cells cell/µl, and lymphocyte count is less than 500 cells cell/µl. The ocular surface at the conjunctiva involvement is reported in around 20% of the cases.

The ocular manifestations of KS consist in mucocutaneous or nodal presentations, but in other parts of the body it can also be presented as nodal, oral, and visceral ones. The beginning of the lesion consists in a plaque or nodules, which after time become ulcerated with bleeding and then are an open door for bacterial infections.

The suspect of this entity is the most relevant clinical finding, because the initial ocular KS can be mistaken for any other entity, such as subconjunctival hemorrhage, conjunctival cysts, pyogenic granuloma, hemangioma, pinguecula, angiomatosis or any other inflammatory disease. The confirmatory diagnosis is always a biopsy of the lesion.[1]

Conjunctival tumor manifests in middle aged and elderly patients and could be a metastatic disease or a primary one. It is normally painless and has the color of salmon pink patch lesion, which could involve unilateral or bilateral manifestations.[2]

CASE REPORT

A 62-year old black female presented to the ophthalmological hospital with a little "nevus" on the left eye previously visualized at the mirror, with one month of development. Physical examination with slit lamp (biomicroscopy) showed a group of veins, painless, vascular redness, with a mass nodular aspect in the mid temporal bulbar conjunctiva, approximately 2mmx4mm (Figure 1). The patient denied any history of trauma or drug abuse.

After that, a systemic evaluation was performed with a serological positive test for antibody for HIV and treponema pallidum infection. Viral load with 200,000 copies per milliliter, with CD4 cell account with 190/mm^3. The confirmatory excisional biopsy showed spindle cells, malignant neoplasm with neovessels, compatible with herpes virus family number 8, KS. Combined antiretroviral therapy has been established since 1997. Surgical resection and systemic control was the baseline treatment. Postoperative evaluation was successful with uneventful signs or recurrence of the lesion after 6 months follow-up.

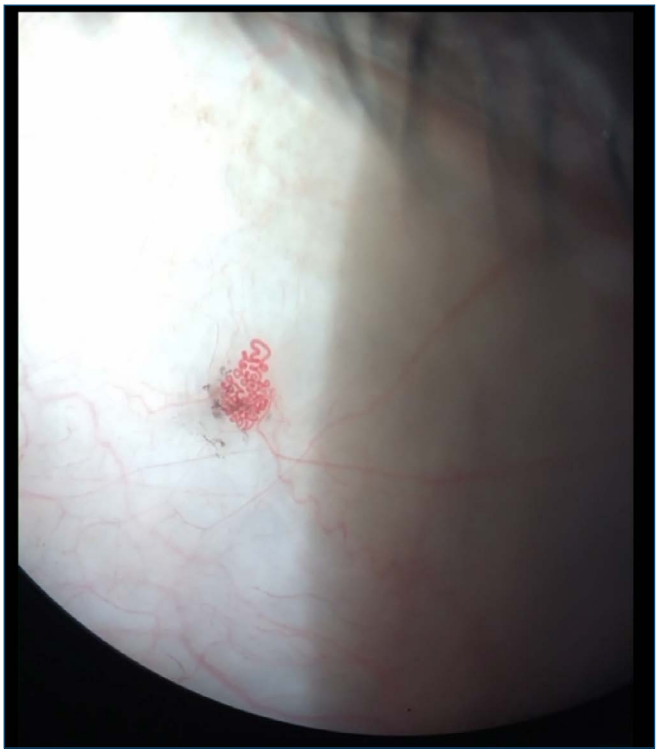

Figure 1. Preoperative slit lamp showed a group of painless veins, with vascular redness, and a mass nodular aspect in the mid temporal bulbar conjunctiva, of approximately 2mmx-4mm.

DISCUSSION

The antiretroviral therapy is the unique treatment to inhibit HIV and the amount of CD4 cells, and viral replication is directly proportionate to change a chronic condition into a fatal one.

The genesis consists in the dysregulation of the expression of cytokines, which has an active participation in the creation of angiogenic growth factors, such as fibroblast growth factor, which when affected become sarcoma cells.[3]

The risk factors that need to be advised are the infections such as *Helicobacter pylori*, *Chlamydia psitacci*, Hepatitis C, due to chronic inflammation. The most important risk factor is the main control of HIV infection.[4]

The integral evaluation of this case includes complete and detailed anamnesis, physical examination, full blood count, metabolic panel, total body computed tomography and bone marrow biopsy.[5]

As a neoplastic tumor, different treatment options need to be considered, included but not limited to radiotherapy, cryotherapy, chemotherapy, and surgical excision, The most common treatment for low grade lesions are removal by radiotherapy, but it depends also on the ophthalmological center experience, the access to the

technology, and the ability of the surgical team. On the other hand, it depends on the extension, localization, and dissemination of the lesion.[6]

The future of the KS treatment is the monoclonal antibodies against CD40, B-cell activating factor of the tumor necrosis factor (TNF) family, intracellular pathways with molecules like Bortezomib that inhibit tumor cell survivals.[7]

In conclusion, we have reported the initial ocular lesion of KS in association with HIV, herpes virus type 8, and treponema pallidum infection. Surgical resection and systemic control was the baseline treatment. To think about this entity before it manifests is the diagnostic challenge. Time is vision.

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