

# Extensive Kaposi's sarcoma in a HIV positive patient: A case report

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## Abstract

Kaposi's sarcoma (KS) is the commonest malignancy associated with HIV/AIDS.

The time of onset of KS varies considerably.

KS may be the first sign of HIV infection but some patients can be at a very advanced stage of HIV infection and already have a history of AIDS-related opportunistic infections (OIs) when they first present with KS.

We present a 30 years old HIV positive male, who came to our ARV clinic with extensive nodular lesions on the mouth, conjunctiva, thorax and face.

The diagnosis of Kaposi's sarcoma was clinically made and preparations for highly active antiretroviral treatment (HAART) began but the patient continued to deteriorate rapidly and he eventually demised.

## BACKGROUND

Immunosuppression is believed to be an integral factor in the pathogenesis of KS.

Recent data has also revealed that all forms of KS are closely associated with human herpes virus-8 (HHV-8), the production of inflammatory cytokines and the deregulation of new blood vessel formation (angiogenesis). (1) (2)

KS most commonly affects the skin and oral mucosa. The initial presentation is usually in the form of pink, purple or red macules or papules, usually asymptomatic predominantly on the face and trunk.

Often found on the tip of the nose, arms, neck or in the mouth, most commonly on the hard palate. As these lesions grow, they may interfere with eating and speaking.

Spread to lymph nodes, the GI tract, lungs or other visceral organs is common.

About 15% of patients visceral KS occurs without any cutaneous or oral lesions.

KS can occur at any CD4 count, but is more aggressive at low counts.

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## COMPLICATIONS

Visceral involvement especially mouth, GI tract and lungs.

- Large lesions may progress to form ulcerative nodules or tumours.
- In the mouth it may cause difficulty in mastication or swallowing and are associated with an increased risk of visceral KS.

HIV/AIDS is a major health problem in South Africa. Our hospital is located in Kwazulu Natal, a province which is the epicentre of the epidemic.

Kaposi's sarcoma is commonly seen in these communities and it is still a source of concern the fact that patients arrive to health care services very late with advanced disease and very low CD4 counts.

## CASE

30 years old HIV positive male patient with previous history of been treated for tuberculosis (TB) in 2005 when he completed a full course of anti TB drugs.

Now referred to our antiretroviral clinic (ARV) for initiation of HAART with a CD4 count of 71 cells/mm<sup>3</sup> (26/01/2005)

On this visit the patient complains of difficulties to swallow and speak and also of having "nodules" on the trunk, and on

the conjunctiva.

On physical exam we found a firm, ulcerated, purple to brown-black nodule, on the thorax, a growth on the conjunctiva, both eyes and on the mouth involving the soft and hard palate.

At this point and based on clinical findings, a diagnosis of Kaposi's sarcoma was made and the patient was classified as Stage IV of the WHO clinical stage classification for HIV/AIDS.

We commenced preparations for HAART, but the patient complicated further with the possibility of visceral involvement considered. He died before specific therapy could be initiated (23/02/2005)

**Figure 1**

Picture 1: Skin lesions on the trunk



**Figure 2**

Picture 2: Kaposi's lesions in the mouth



**Figure 3**

Picture 3: Gums and tongue involvement



**Figure 4**

Picture 4: Kaposi's lesions in the eye



**Figure 5**

Picture 5: Chest X rays



## **DISCUSSION**

Kaposi's sarcoma was first described in 1872 by the Hungarian dermatologist Moritz Kaposi. It was a rare condition before the AIDS epidemic. (2)

Four different forms of Kaposi's sarcoma have been

described: classic, endemic, acquired and epidemic.

Epidemic Kaposi's sarcoma is the form associated with HIV infection. It tends to follow a more variable but potentially more aggressive course than other forms of Kaposi's sarcoma.(2)

While it is commonly found on the skin, KS can occur anywhere in the body.

KS is rare among women possibly due to hormonal factors, but it is still more common in HIV positive than HIV negative women. (3)

Our patient presented with lesions in the mouth, chest, eyes and face.

The diagnosis of KS could be made by biopsy but doctors experienced on HIV may be able to diagnose KS without performing a biopsy. (2)

In our patient the presence of a firm, ulcerated, purple lesion on the skin, conjunctiva and oral mucosa corresponded with findings of KS and the diagnosis was clinically based.

Treatment approach depends on the location of the lesions, course and extent of KS, and HIV disease stage. (1)

In the age of HAART, KS generally responds well to therapy. (4)

Optimal HAART, with maximal viral suppression and prevention of other opportunistic infections (OIs), is an essential part of the treatment often slows progression of KS and may result in complete remission, even without other therapy HAART is associated with prolonged survival. (1)

Our patient did not receive any specific therapy for the KS and he could not benefit from HAART due to his late arrival to our services.

KS of the skin is not in itself a life threatening condition and there is no evidence that the treatment of one or two small skin lesions makes any difference to life expectancy. Deciding to leave KS untreated also avoids the toxic effects of the chemotherapy which may also be immunosuppressive. (2)

There are a range of treatments available for KS. These include local or general chemotherapy and pathogen based treatments.

Specific treatment for KS when indicated and available may

be use in addition to HAART.

Survival time is much greater in individuals who present with KS as a first sign of AIDS.

The patient is question had other opportunistic infections prior to the diagnosis of Kaposi's sarcoma.

### **CONCLUSIONS**

Characteristic early clinical signs of Kaposi sarcoma should be considered when assessing HIV positive patients.

The above will help to make a correct staging of the patient with subsequent enrolment on the ARV program.

### **References**

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