

# A case study of multidisciplinary palliative and supportive care management of AIDS-related Kaposi's sarcoma

## Introduction

Mr. K. O a 39year old man was referred to our Pain and Palliative Medicine Department from a Secondary level of care for pain management. He presented at our usual Tuesday HIV/AIDS clinic on account of hyper-pigmented, papular nodular lesions on the right lower Limb with some disability. There was also evidence of bone and surrounding neurovascular tissues involvement. He was diagnosed to be sero-positive about four years ago and on Highly Active Anti-Retroviral Therapy (HAART) with an initial CD4 count of 275cells/ul. His CD4 count had nose-dived at the time of referral to 84cells/ul, was seriously in pain, suffering of numerous psychosocial issues, socio-emotionally depressed especially about the body image disfigured leg lesions. Fear of the unknown, Shy, introverted, withdrawn and had self-guilt about his medical status and late presentation. The spouse and the two children were sero-negative and very supportive. His clinical condition appeared to be further deteriorating as the CD4 count level was not improving and an impression of an immunological failure was being considered. The care plans included switching his current HAART from the lamivudine, tenofovir and efavirenz. In line with palliative care philosophy, there was need for a family meeting to towards patient and family social, emotional and spiritual care support. There was also an urgent need to co-manage the patient with a dermatologist in view of the skin lesions and diagnosis of Kaposi's sarcoma (KS).

Dermatologist was invited to review and intervene in view of the worsening KS with buccal cavity involvement. Dermatologist on further evaluation; the patient's histopathology result confirmed KS diagnosis and he was worked up for Chemotherapy regimen of Vincristine, and Bleomycin and also recommended daily Gentian violet wound dressing. Four weeks post-chemotherapy, a repeat CD4 count showed a further decrease of CD4 count to 16cells/ul. A further assessment revealed an ongoing Immunosuppressive effect accentuated by the chemotherapy. The results of investigations done were as follows; FBC: PCV- 33%, WBC (total) 3.0 X 10<sup>9</sup>, Neutrophil -50%, Lymphocyte -46%, Eosinophil-04%, electrolyte, urea and Creatinine were all within normal limits, thus the urgent need for switching the HAART regimen. A Multidisciplinary Team meeting reached a consensus that the patient should be switched to second line HAART (Alluvia, Truvada, Zidovudine). A few months later the CD4 count was repeated- 21cells/ul, together with other basic investigations. The medications also had to be reviewed once again and zidovudine was withheld from regimen on account of evidences of bone marrow suppression. But the Patient continued the other two regimen of Alluvia /Truvada together with co-trimoxazole for the opportunistic infections and heamatinics.

At this point the patient was already showing some signs of anxiety and depression so his clinic attendance was changed to a monthly appointment with adequate social, emotional and spiritual care and support. A month later, there was a noticeable clinical evidence of relapse and extension of KS to the left lower limb associated with neuropathic pains on both lower limbs. A Combined treatment

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of both Chemotherapy and Radiotherapy was suggested, and the patient had to be referred to a Radio oncologist at another facility for review. He was also referred to the Urologists on account of recurrent dysuria. The repeat CD4 count a month later was - 71cells/ul. The Urologists detected that patient had urethral stricture and had to be worked up for possible Urethroplasty. However, KS on both lower limbs became worsened and infested with maggots despite frequent dressings, patient was already being worked up for Radiotherapy with possibilities of combining topical infiltration and systemic routes of chemotherapy.

The pain and palliative medicine department actively managed his total pains along physical, social, emotional and spiritual care and support for him and the entire family. His nociceptic and neuropathic pains were adequately managed with opioids (oral morphine), tricyclic antidepressant, NSAIDs and acetaminophen. A repeat CD4 count (3months later) was 89cells/ul, radiotherapy could not be commenced due to low CD4 level, and he was encouraged to be optimised at least to a CD4 >200cells/ul. Nevertheless, patient continued to benefit from the multidisciplinary team care of pain and palliative medicine team, dermatologist and Urology teams. Patient also had good adherence to all the clinic appointments and improved emotional with strong spiritual faith and hopes including good family care and support. However, his clinical condition seemed not to be improving despite the adequate multidisciplinary teams management. Patient passed on at home two weeks after his last pain and palliative care clinic appointment, the family alerted us immediately and our team subsequently rushed down to certify him dead at home.

## Discussion

Kaposi's sarcoma is a vascular tumor that manifests as nodular lesions on the skin and, to a lesser extent, visceral organs. Kaposi's sarcoma is the most common neoplasm encountered in HIV-infected patients, and disproportionately involves men who have sex with men. Development of Kaposi's sarcoma is an AIDS-defining condition. AIDS-related Kaposi sarcoma, unlike other forms of the disease, tends to have an aggressive clinical course. Kaposi sarcoma Lesions may involve the skin, oral mucosa, lymph nodes, and visceral organs.<sup>1</sup>

Cutaneous lesions may occur at any location but are typically concentrated on the lower extremities and the head and neck regions. Lesions may have macular, papular, nodular, or plaque like appearances. Nearly all lesions are palpable, non-pruritic and may range in size from several millimeters to several centimeters in diameter. Lesions may assume a brown, pink, red, or violaceous color and may be difficult to distinguish in dark-skinned individuals. It may be discrete or confluent and typically appear in a linear, symmetrical distribution. Mucous membrane involvement is also common (palate, gingiva, conjunctiva), so as gastrointestinal lesions occurring anywhere in the gastrointestinal tract.

## Conclusion

In recent times, with evidenced based HAART positive clinical outcomes, the incidence of AIDS defined cancer had drastically reduced. Nevertheless, many patients still present very late with AIDS due to late diagnosis with co-morbidities like Tuberculosis, lymphoma and other form of cancers. Kaposi Sarcoma in such late stages especially with aggressive metastasis usually exhibits worse prognosis outcome. Although the internal organs involvement in this patient was not fully explored but the buccal and urethral involvement were obviously involved. The bony involvement and suppression is not a very common and this case study exemplified an uncommon KS Case that defied all the multidisciplinary team medical interventions.<sup>2</sup> The need for interdisciplinary team management of chronic diseases like cancer and HIV/AIDS cannot be overemphasized. It is noteworthy that all the HAART, chemotherapy and radiotherapy interventions were palliative measures as all hopes of cure were already dimmed due to late presentation and diagnosis (Figure 1–3).



Figure 1 At first presentation.



Figure 2 At second presentation.



Figure 3 At third presentation.

The pain and palliative medicine team served as the facilitator for the patient to access the needed multidisciplinary teams of dermatologist, radiotherapist and urologist. The patient was well stabilized throughout the disease trajectory by the palliative medicine as there was no single episode of hospital admission due to the fact that the primary aim was to encourage, empower and support the patient to stay at home.<sup>3,4</sup>

The patient and family centered care along the holistic supportive care exemplified the relationship between the palliative care team bending backward to go to the patient's house for certification of death at home.

## Acknowledgments

None.

## Conflicts of interest

The authors declare there is no conflicts of interest.

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