CASE REPORT: *WALKING THE OPPORTUNISTIC INFECTION FINE LINE* - TREATING KAPOSI SARCOMA, MULTIDRUG RESISTANT TUBERCULOSIS, HIV TREATMENT FAILURE AND SEVERE MALNUTRITION IN AN HIV POSITIVE ADOLESCENT IN MBEYA, TANZANIA

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Background:

Patients with severe immunosuppression are at risk to acquire life threatening opportunistic infections requiring complex treatments.

We describe the challenges and successes of treating a severely malnourished HIV positive adolescent on 2nd line ART who was treated for Kaposi sarcoma (KS) while receiving concurrent treatment for multidrug resistant tuberculosis (MDR TB).

Case Report: Clinical Presentation

A 21 year old HIV positive female well known to the Mbeya Center of Excellence (COE) presented for a sick visit with a nodular violaceous palate lesion and inguinal lymphadenopathy (Fig 1). The patient also had abdominal distention and severe acute malnutrition (SAM; BMI 13 kg/m^2). CXR showed streaky peribronchial thickening and abdominal ultrasound revealed massive ascites. CBC was notable for lymphopenia (absolute lymphocyte count of 670 x 10^{3}cells/µL) and moderate anemia (Hb of 10.9 g/dL).

Despite initiating 1st line ART in 2011, the patient had poor adherence, persistent severe immunosupression with CD4 never exceeding 200 cells/µL and multiple elevated viral loads. At time of evaluation, the patient had been on second line ART (ABC-3TC-ATV/r) for 24 months but still had CD4 of 1 cells/µL (0%) and viral load 121,217 cp/mL.

Eight months prior to presentation, the patient had been diagnosed with confirmed MDR lymph node TB. She completed intensive treatment with kanamycin, pyrazinamide, levofloxacin, ethionamide and cycloserine at Kibong'oto National TB Hospital and was then transferred to Mbeya to complete treatment with pyrazinamide,levofloxacin, ethionamide, cycloserine, and pyridoxine.

Case Report: Management

The patient was clinically diagnosed with Kaposi sarcoma and was treated at the COE with paclitaxel 135mg/m^2 (dexamethasone, ranitidine and chlorphenamine given as premedications). In total, she was on 14-16 different medications at any given time during her treatment course. Dedicated care was taken throughout her treatment to monitor drug-drug interactions, toxicities, and new opportunistic infections while supporting her adherence, nutrition and well being.

After six cycles of chemotherapy, she achieved partial remission with reduction in palate lesion size and ascites and complete resolution of inguinal lymphadenopathy (Fig 2). Her most recent CD4 was 45 cells/µL (5%) and VL of 761 cp/mL. She had improvement in her nutritional status (most recent BMI 15 kg/m^2) and reported better quality of life. She did not experience any grade III or IV drug reactions during treatment, and well tolerated concurrent MDR-TB, 2nd ART and chemotherapy.

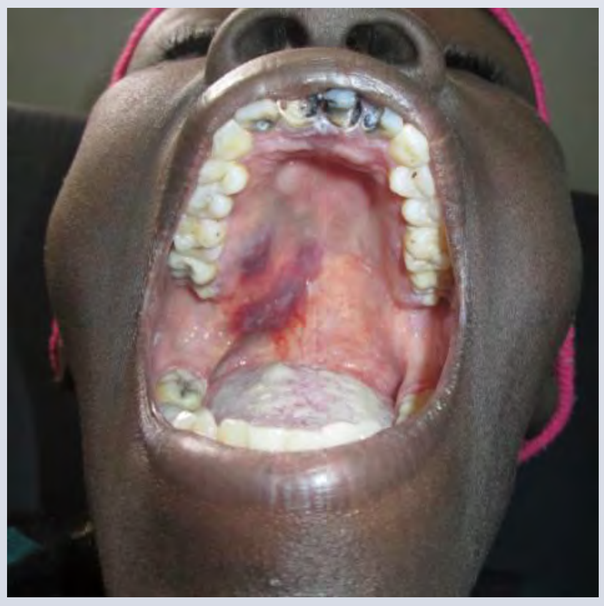

Figure 1

Figure 2

Discussion:

We describe a case of successful concurrent treatment of Kaposi sarcoma and MDR TB in a complex and severely immunosuppressed patient on 2nd line ART with severe acute malnutrition. This was the first case of its kind at the Mbeya COE, and demonstrated how a thoughtful, detailed patient-centered approach by a dedicated clinical team can successfully manage a patient with KS, MDR TB, treatment failure and SAM within the resources of the COE.