Kaposi Sarcoma in a 27 year-old man: A Case Report

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Background

- Kaposi sarcoma is a vascular tumor associated with human herpesvirus 8 (HHV-8). A higher incidence is present in people with weakened immune systems, such as those with HIV/AIDS or organ transplant recipients. (Uldrick et al)
- The prevalence of KS has decreased in recent years in the United States due to increased access to HIV testing and antiretroviral therapy. (Luo et al)
- KS is an AIDS-defining illness (regardless of CD4 count) (CDC guidelines) and is seen most commonly in gay or bisexual males without history of intravenous drug use or transfusion (Beral et al).

Case Presentation

- 27 year-old male without any history of IV drug use with HIV diagnosed 3 years ago, syphilis, HSV1&2, presenting with a painful right lower extremity mass that has been enlarging over several months.
- Antiretroviral medications were started 10 months prior to presentation, and patient has noticed purplish lesions to the lower abdomen and lower extremities that have progressively enlarged and increased in number.
- Most recent CD4 count was 342. Quantiferon TB Gold was negative.
- Chest X-ray showed bilateral perihilar airspace edema/infiltrates and small layering bilateral effusions.
- CT abdomen and pelvis was significant for scattered hypodense lesions in the bones, prominent lymph nodes in the axillae, lower abdomen and pelvis.
- Excisional biopsy of axillary lymph node (Figure 4) and skin nodules (Figure 5) showed findings consistent with Kaposi Sarcoma.
- The patient was diagnosed with disseminated Kaposi Sarcoma and was recommended to undergo systemic chemotherapy.

Figures

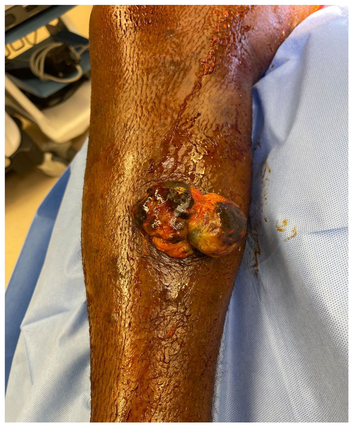

Figure 1. Right Leg Mass

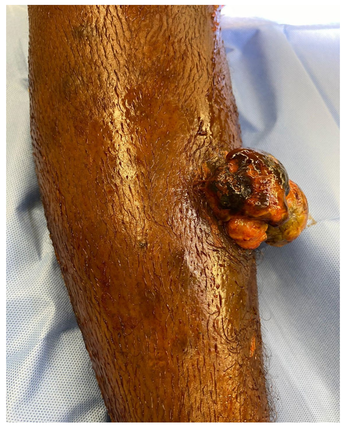

Figure 2. Lateromedial view of right leg, showing the tumor border

Figure 3. Multiple nodules involving lower abdomen

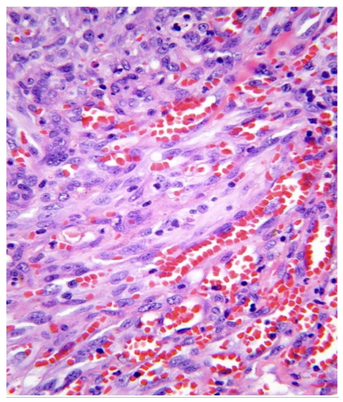

Figure 4. Lymph Node biopsy showing low grade spindle cells neoplasm with numerous intervening, blood filled channels.

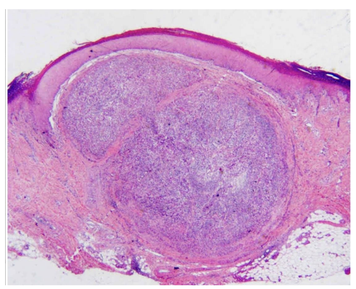

Figure 5. Skin excision showing a well defined nodule of Kaposi sarcoma at the tumor stage

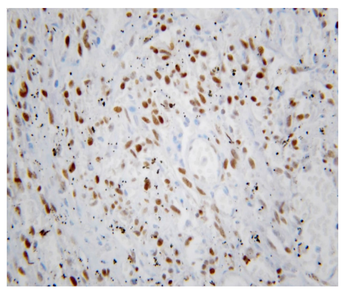

Figure 6. HHV8 immunostain positive

Discussion

- The progression of KS can vary depending on the individual's immune status, and early lesions of KS may be mistaken as purpura, hematomas, angiomas, dermatofibromas or nevi.
- Immune reconstitution inflammatory syndrome (IRIS) is a collection of host responses that can occur when antiretroviral therapy is initiated, which can lead to progression of KS (Cheng et al). Specifically, corticosteroid therapy has been associated with induction of KS. (Trattner et al)
- The prognosis for advanced Kaposi sarcoma is generally poor. Success is often seen with individualized treatment plans for managing Kaposi sarcoma in people with different underlying health conditions. Treatment options include radiation therapy, intralesional chemotherapy, systemic chemotherapy, immunotherapy, and local resection. (Bower et al).

Conclusion

- Although rare, Kaposi Sarcoma can still present in vulnerable patient populations and require individualized approaches to management depending on underlying conditions.

References

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