Simultaneous Diagnosis of HIV and Disseminated Kaposi Sarcoma

Catherine Loehr, MD; Giacomo Adoncecchi, BS; Alexandra Denys, PhD; Matthew Bennett,MD; Maren Bell, MD; Allison Pinner, MD
Department of Internal Medicine, Louisiana State University Health Sciences Center, New Orleans, LA

Case Report:

A 26-year-old man with newly diagnosed HIV (on Biktarvy, recent undetected viral load, CD4 496) complicated by Kaposi Sarcoma (KS) presented to the ED for gradual severe left lower extremity (LLE) pain and edema radiating to his groin onset 2 weeks prior. Also complained of subjective fever, chills and night sweats.

He had a previous episode of generalized swelling 7 months prior when his oropharyngeal mass was biopsied and found to be HIV positive with KS. He was initiated on antiretroviral therapy with Biktarvy and referred to oncology for KS management where he completed six cycles of Doxorubicin with swelling that gradually improved. However, after his final cycle, he was lost to follow up and did not undergo staging imaging.

During this admission, physical exam notable for tenderness and edema from LLQ abdomen to entire LLE with skin induration, hyperpigmentation, several raised lesions and excoriations present. Extensive edema to penis and testicles as well. Bilateral inguinal lymphadenopathy noted. Labs notable for: WBC 6, Hgb 10.4, ESR 35, CRP 6.3. Blood and urine cultures negative.

LLE ultrasound confirmed diffuse edema and lymphadenopathy, while ruling out fluid collection. Pan CT notable for lesions on the bilateral chest wall and lumbar spine concerning for metastatic KS. It was evident that lymphatic obstruction due to KS was the primary cause of his presentation, leading to severe pain and anasarca. His urinary output responded to diuretics, but due to lymphatic obstruction, there was only minimal improvement in edema. Vancomycin was initiated for cellulitis in the setting of purulent skin lesion drainage and discharged on bactrim. Resumed Biktarvy daily to maintain an undetectable viral load. Since he progressed within 3 months of receiving doxorubicin indicating refractory disease, oncology planned for paclitaxel chemotherapy, with a focus on palliative care for pain management.

Discussion:

Kaposi Sarcoma is an AIDS-defining illness characterized by the development of vascular tumors, often associated with infection by human herpesvirus-8 which is characterized by angiogenesis, inflammation and cellular proliferation. KS is the most common tumor in individuals with HIV. Patients with HIV-related Kaposi sarcoma usually respond well to HAART, which can cause regression of their sarcoma. This case highlights a rare and challenging clinical scenario, involving the simultaneous diagnosis of HIV and KS with KS progressing despite HAART and chemotherapy. KS usually presents as a cutaneous manifestation but can involve a wide range of visceral organs, including the oral cavity, gastrointestinal tract, and lungs. Visceral involvement is typically a later manifestation of disease and is unusual as an isolated site for the initial presentation.

This case report demonstrates the aggressiveness of KS, as the patient experienced metastatic spread to the oropharynx, spine, and other areas of the body despite apparent initial

improvement. The patient was lost to follow-up after completing chemotherapy and presented with LLE edema, groin pain, and systemic symptoms. Imaging indicative of progressive disease and lymphatic obstruction. This case serves as a reminder about the potential aggressiveness of KS, even in the setting of HAART and chemotherapy. It underscores the importance of a holistic approach to patient management, involving regular monitoring, patient education, and the incorporation of palliative care to improve the overall quality of life for patients facing the challenges of AIDS-related complications.