A 24-year-old homosexual man presented to the hospital with a one-month history of a black eye and shortness of breath (SOB). He had recently been released from jail where he had experienced progressive constant SOB and fatigue. His black eye had appeared near the same time, and the patient related it to recent dental work. Examination revealed an oval shaped lesion 3 cm in length below the right eye (Figure 1) which was mildly painful to palpation; he had multiple similar lesions on the chest, back, and lower extremities. Intraoral examination revealed violaceous non-blanching plaques along the hard and soft palate (Figure 2). Lung and cardiac examinations were normal. White blood cell count was 3.15 K/µL, and hemoglobin was 11.6 gm/dL. His chemistry panel was normal. HIV screening was positive, the HIV-1 RNA viral load was 581,000 copies/mL, and the CD4 count was 41 cells/µL. Initial chest x-ray showed a reticular nodular pattern bilaterally. Biopsy of skin lesions revealed atypical vascular proliferation consistent with nodular Kaposi’s sarcoma (Figure 3 and Figure 4). Computed tomography of the chest showed multifocal airspace disease suspicious for *Pneumocystis jirovecii* pneumonia or possibly Kaposi’s sarcoma. The patient was admitted to the hospital, and treatment was started with Dolutegravir 50 mg BID and Entecavir-Tenofovir 200 mg-300 mg QD. The patient’s hospital course was otherwise unremarkable, and he was discharged 10 days later with improvement in presenting symptoms. After discharge, the patient was followed by Infectious Disease, Pulmonology, and Oncology in the outpatient clinics. Further workup included bronchoscopy and lymph node biopsy which confirmed metastatic Kaposi’s sarcoma with pulmonary involvement.

**Discussion**

Kaposi’s sarcoma, a relatively indolent disease, has become increasingly rare with improved treatment and screening for HIV/AIDS. It now occurs at a rate of about 6 cases per million people each year. The disease is caused by infection with the human herpes virus 8 (HHV-8). The classification of the disease is divided into 4 groups: Classic, originally described by Dr. Moritz Kaposi in 1872, endemic (occurring mainly in sub-Sahara Africa), iatrogenic, and AIDS-associated. Due to his presentation and prevalence of *Pneumocystis jiroveci*, this patient was initially started on treatment for *Pneumocystis jirovecii* in addition to anti-retroviral therapy (ART). The treatment, however, did not improve his symptoms, thus warranting bronchoscopy. The primary treatment of Kaposi’s sarcoma...
is treatment of HIV infection using ART. Oral lesions can be treated with vinblastine; therapy for individual lesions can be initiated with local management such as radiation. There is currently no consensus on systemic treatment; however, in individuals with progressive or severe Kaposi’s sarcoma, combination of highly active anti-retroviral therapy (HAART) and chemotherapy (liposomal doxorubicin, liposomal daunorubicin, or paclitaxel) reduced the disease progression to a greater extent than HAART alone.

Paradoxically, initiation of ART or HAART for a patient who has already been diagnosed with Kaposi’s sarcoma can lead to immune reconstitution inflammatory syndrome (IRIS) and subsequent Kaposi’s sarcoma exacerbation leading to significant increase in morbidity and mortality.

Involvement of visceral organs is infrequent, and therefore image staging is not routinely completed. “In the multivariate analysis, staging (T1), CD4 cell count (<200 cells/µl), [and] positive HHV8 DNA in plasma, at the time of diagnosis, predict evolution towards death or the need of chemotherapy.” Kaposi’s sarcoma has also been found to present in the lungs, which is a possible manifestation for this patient. Additionally, the patient’s symptoms of SOB and fatigue have appeared in other patients with pulmonary Kaposi’s sarcoma.

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