A rare case of isolated Pulmonary Kaposi Sarcoma in a patient with HIV.

Introduction: Kaposi sarcoma (KS) is caused by Human Papillomavirus-8 and is considered an HIV-defining illness. AIDS-related KS is a low-grade vascular tumor. In 80-90% of cases, pulmonary involvement with KS occurs in conjunction with the extensive mucocutaneous disease. However, pulmonary involvement can be the initial manifestation of KS in 15% of the cases.

Case Description: A 41-year-old African American man with a known diagnosis of HIV presented to the emergency department with a 7-month history of progressively worsening dyspnea and unintentional weight loss of 15lb. The viral load was 252,415 copies/ml and the CD4 count was unknown. Medications upon presentation included biktary (bicetagravir-emtricitabine-tenofovir) with self-reported compliance. No skin lesions or rash were noted on the exam. CT chest findings were negative for PE but revealed infiltrates with a perivascular/lymphatic distribution. Antibiotics were started for community-acquired pneumonia and bronchoscopy with lung biopsy was performed and pathology results revealed the presence of KS. The patient was started on chemotherapy, and antibiotics were discontinued.

Discussion: KS can be found as an isolated pulmonary manifestation in HIV patients in 15% of the cases. Most common CXR findings include ill-defined nodules, reticular and reticulonodular opacities, and consolidation with a predominantly perihilar distribution. Common findings include Kerley B lines, pleural effusions, the halo sign, consolidation, ground-glass opacities, nodular pleural thickening, and lymphadenopathy(1). Treatment consists of optimizing antiretroviral therapy and starting systemic chemotherapy (2).

References: (1) Imaging Features of Pulmonary Kaposi Sarcoma–Associated Immune Reconstitution Syndrome: American Journal of Roentgenology: Vol. 189, No. 4 (AJR) (ajronline.org) (2) Pulmonary Kaposi Sarcoma in AIDS (nih.gov)