INTRODUCTION

Coinfection of untreated HIV and COVID-19 infection can result in various superimposed infections and secondary malignancies such as Kaposi sarcoma (KS) and AIDS- (acquired immunodeficiency syndrome) defining illness.

CASE PRESENTATION

- A 37-year-old male with a past medical history of HIV presented with productive cough, dyspnea and odynophagia for 2 weeks.
- The patient was hypoxic on presentation requiring 5 liters of supplemental oxygen via nasal canula.
- Physical exam, was remarkable for oral thrush on his tongue and multiple red violaceous macules and papules on his back, chest, and roof of his mouth (Figure 1).
- Computed tomography (CT) chest showed predominant bilateral lower lobe, peribronchovascular consolidations and ground glass opacities with associated bronchial wall thickening concerning for KS. (Figure 2)
- He tested positive for SARS-CoV-2.
- The patient received a 10-day course of dexamethasone 6 mg daily and 5-day course of Remdesivir for COVID-19 pneumonia.
- Given concern for pulmonary involvement of KS, a bronchoscopy was performed on day 10 which unveiled a flat, violaceous mucosal lesion in the right mainstem bronchus suspicious for KS (Figure 3).
- Bronchoalveolar lavage fluid was collected from the right lower lobe which tested positive for Human herpes virus-8 (HHV-8).
- In light of this constellation of findings, the patient was diagnosed with disseminated KS. On day 15 of hospitalization, the patient began having hemoptysis in the setting of thrombocytopenia and underlying pulmonary KS.

DECISION MAKING

- Due to worsening hypoxia the patient was transferred to the medical intensive care unit and eventually intubated on day 18.
- Subsequently, the patient developed multi-organ failure including cardiovascular compromise and acute kidney injury requiring continuous renal replacement therapy.
- Due to worsening multi-organ failure and prolonged ICU stay with no meaningful functional recovery, a shared decision was made by the family and treatment team to opt for comfort measures. The patient passed away shortly afterwards.

CONCLUSIONS

In conclusion, radiologically KS can present like COVID-19 pneumonia with diffuse grand glass opacities and consolidations, but unlike COVID-19 the condition usually manifests in peribronchovascular regions. Steroid use can result in disease progression of Kaposi sarcoma (KS), so the benefits of therapy must be weighed against the risks before steroid initiation in patients with co-occurring KS and COVID-19 pneumonia.