Is there more to the story?
A case of AIDS with PJP pneumonia and Kaposi's sarcoma

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Background

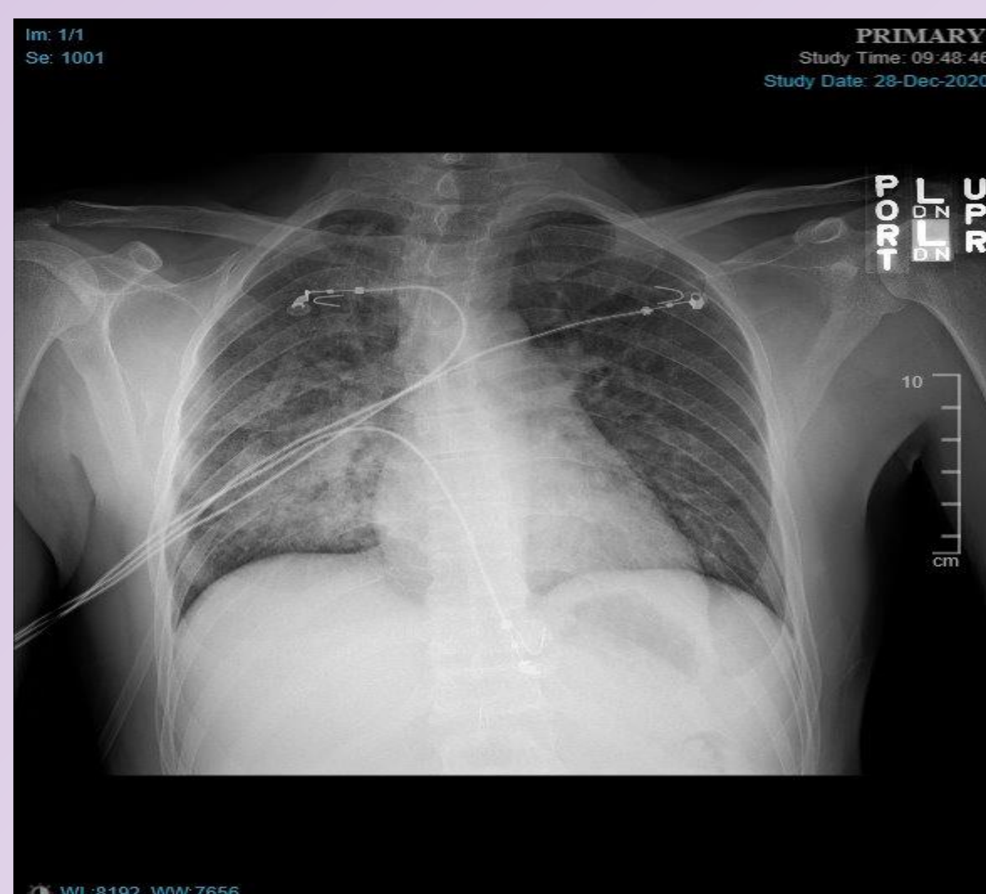
Nearly 15% of HIV-infected persons in the US remain unaware of their infection. Undiagnosed HIV-infection can often lead to AIDS with opportunistic infections leading to significant morbidity and the risk of further transmission to others. We present a case of undiagnosed HIV-infection found to have AIDS with PJP pneumonia and Kaposi's sarcoma.

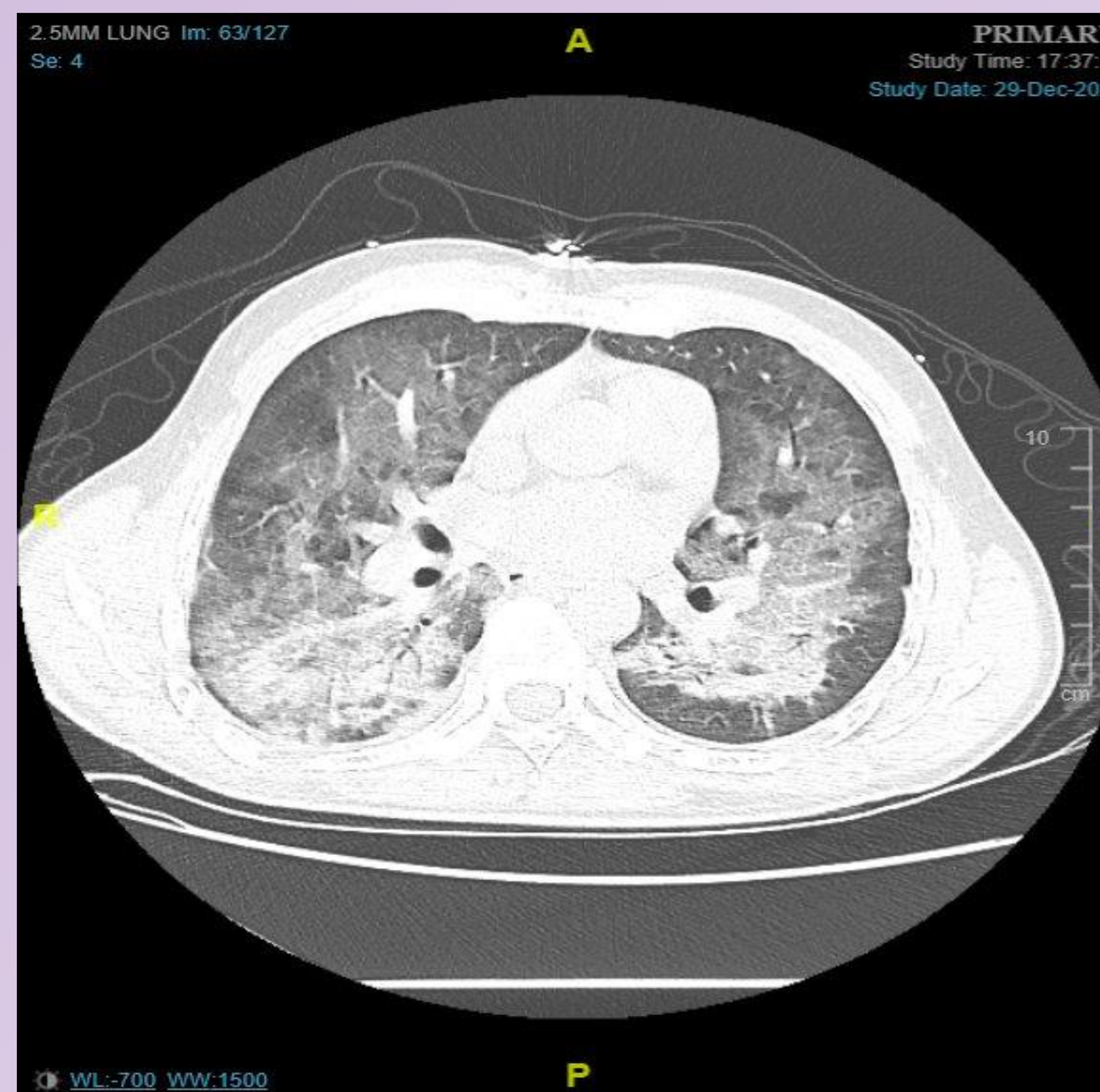
Clinical case

45-year-old male with no PMH presented with complaints of nonproductive cough, shortness of breath, fevers and chills since 1 month, review of symptoms included weight loss, malaise and generalized body rash since 6 months. On examination, patient was febrile, tachycardic, tachypneic, hypoxic and cachectic appearing, he had bilateral crackles on lung auscultation, skin findings showed pink-purplish colored raised lesions of varying sizes over the trunk, back, arms and legs. Labs were significant for leukocytosis, CXR showed right lung infiltrates.

Due to the given concerning findings, an HIV screening was done which was positive. ID was consulted. Pt was empirically started on Ceftriaxone, Azithromycin, Bactrim and Prednisone for community acquired pneummonia and PJP coverage. Pt's HIV viral load came back to be 248,721 copies/ml and CD4 count was 16 cells/microL. CT chest showed extensive bilateral, perihilar, groundglass opacities. Bronc hoscopy was done with BAL positive for PJP. Rest of the opportunistic infection workup was negative. Skin biopsy of the lesion confirmed Kaposi's sarcoma. An EGD and Colonoscopy were negative for Kaposi's sarcoma in the GI tract. Pt clinically improved and was planned to start on HAART therapy outpatient.

Image findings





CT chest: Extensive bilateral, perihilar ground-glass opacities with more focal consolidation the superior segment of the lower lobes

Conclusion

AIDS is the last stage of chronic HIV-infection and is defined as a CD4-cell count of < 200 /microL or the presence of any AIDS-defining condition regardless of the CD4 cell count. AIDS-defining conditions include opportunistic infections and certain malignancies. Our patient had a CD4 count of 16, an opportunistic infection with PJP pneumonia and a malignancy. PJP pneumonia usually presents as a sub-acute illness with fever, dyspnea and dry cough in patients with CD4 count < 200 who is not on prophylaxis.

CT chest usually demonstrates bilateral patchy ground-glass opacities. Diagnosis often requires bronchoscopy to demonstrate the causative organism. Treatment is with high dose Bactrim with addition of steroids if patient is hypoxic on initial presentation. AIDS-related Kaposi sarcoma is a vascular tumor associated with infection by human herpesvirus-8. KS is the most common tumor arising in HIV-infected persons. Kaposi's sarcoma typically presents with cutaneous disease but can also involves visceral organs particularly the oral cavity, GI tract and lungs. Diagnosis is made with a skin biopsy and treatment includes ART therapy with possible chemotherapy depending on the extent of the disease.

References

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