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Simultaneous occurrence of KSHV-associated malignancies in a patient affected by HIV

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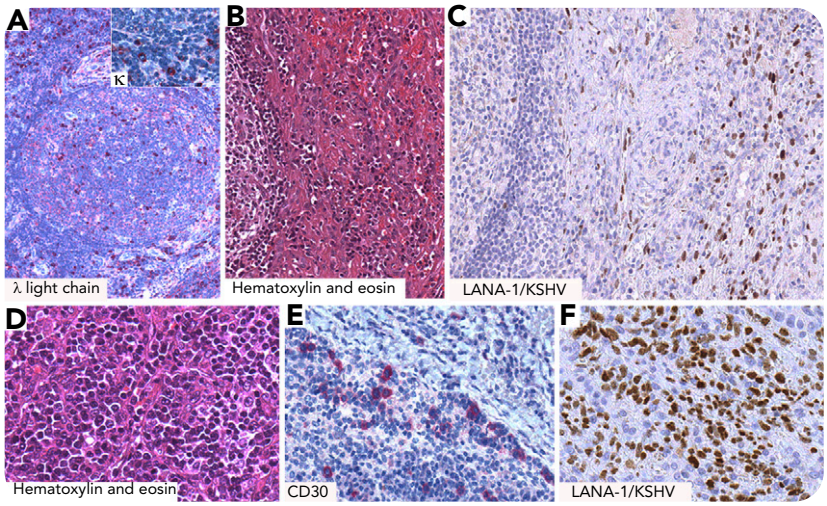

A 26-year-old man, diagnosed in 2012 with HIV infection after engaging in high-risk behaviors (zenith HIV, 104 603 copies per mL, in 2014; nadir CD4 count, 299 per μL in October 2015), was hospitalized for fever in January 2016, 2 months after beginning combined antiretroviral therapy (cART). Assessment of an enlarged axillary lymph node showed multicentric Castleman disease (MCD) with concomitant Kaposi sarcoma (KS). On transfer to our center, the patient had fever; signs of weight loss; KS lesions affecting the skin, oropharynx, and nasopharynx; splenomegaly; and bilateral pleural effusions. A positron emission tomography-computed tomographic scan showed asymmetric increased fluorodeoxyglucose uptake in the cervical, axillary, and mesenteric lymph nodes. A laboratory examination revealed normocytic anemia, hypoalbuminemia, KSHV viremia of 4565 copies per mL, Epstein-Barre viremia (EBV) of 1490 copies per mL, CD4 count of 384 per μL, and undetectable HIV viremia. Review of the single-node biopsy specimen confirmed the diagnosis of MCD, showing $\Lambda+/\kappa-$ plasmablasts (panel A, original magnification ×120; inset, ×280), KS (panels B-C, original magnification ×170), and revealing small areas of EBV$^+$ primary-effusion lymphoma (panels D-F; original magnification ×400 [D,F], ×300 [E]) expressing CD30 (panel E). Thus, 3 malignancies were present in the single lymph node. The patient was treated with 6 cycles of cyclophosphamide, doxorubicin, and etoposide chemotherapy plus cART, with complete remission lasting 5 years, undetectable HIV and KSHV viremia, and a high CD4 count (802 per μL).

As multiple KSHV-associated malignancies may be present, careful pathological review is critical for providing optimal treatment and the best outcome for patients.

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