

Conclusion: TNF α and IL-18 in combination with CMV viral load may be useful in predicting likelihood of TI-CMV. This is important in situations where tissue biopsies are not feasible, and adds to our diagnostic capability for TI-CMV in SOT recipients.

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687. Iatrogenic Kaposi's Sarcoma Following Treatment with Vedolizumab

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Session: P-27. Diagnostics: Virology

Background: Kaposi's sarcoma (KS) is a vascular tumor caused by human herpes virus-8 infection (HHV-8) commonly involving the skin. We report a case of a patient with controlled HIV who developed Kaposi's sarcoma on vedolizumab.

Darkened hyperkeratotic plaque on his left medial foot

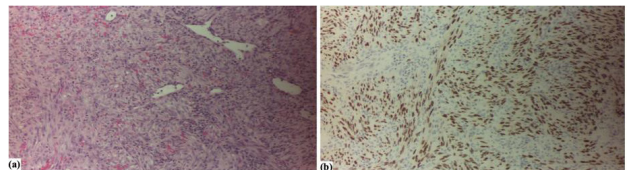


Methods: A 39-year-old homosexual male with a history of Ulcerative Colitis (UC), Hodgkin's lymphoma in remission and HIV presented with complaints of abdominal pain and bloody diarrhea. He had new tender lesions on his left foot which was absent at his previous admission a month ago. The lesions started as macules and later progressed to tender lesions. Mesalamine and oral corticosteroids were previously prescribed without symptomatic relief and he was started on vedolizumab 2 months ago. On physical exam he had abdominal tenderness, tender cervical and inguinal lymph nodes, and dark macules on his feet. Digital rectal exam revealed bloody mucoid stool. Laboratory showed white blood cell count of 12,600/mm³, ESR of 132 mm/hr and CRP of 4.6 mg/dL. His CD4 T-cell count was 873 cells/mm³ and viral load was 50 copies per milliliter. Cervical lymph node biopsy showed polymorphous population of lymphocytes but was negative for malignant cells. Biopsy of the foot plaques showed atypical intradermal vascular and spindle cell proliferation positive for HHV-8 and for vascular marker CD34. The results were consistent with the diagnosis of KS. Serology was also positive for HHV-8 with high viral titers of 74 copies/mL. Colonoscopy showed severe proctitis with deep ulcerations in a continuous pattern in the rectum with a normal sigmoid colon. Follow up colonoscopy showed improved proctitis and he was started on doxorubicin to treat KS with improvement of the foot lesion a month later following treatment.

Dark macules on the sole of both feet



Figure 3a: Spindle cells with irregular small vessel proliferation and red blood cell extravasation between tumor cells Figure 3b: Immunohistochemical stain showing HHV-8 expression of spindle cells



Improvement of the foot lesion



Results: Vedolizumab is a monoclonal antibody that prevents the recruitment of lymphocytes to the inflamed tissue. It is approved for the treatment of IBD and has shown efficacy and safety. The iatrogenic form of Kaposi's sarcoma occurs in patients on immunosuppressive therapy, as this patient.

Conclusion: Patients with IBD on immunosuppressive drugs should be followed up closely and screened for latent viral infections prior to initiating therapy. As in the patient, HHV-8 should be recognized as a likely underlying opportunistic infection in immunocompromised patients with IBD.

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688. Marginal Structure Models to Estimate the Effect of Cytomegalovirus Infection on Hospitalization Among Children Undergoing Allogeneic Hematopoietic Cell Transplantation

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Background: Children receiving an allogeneic hematopoietic cell transplant (HCT) are at risk for cytomegalovirus (CMV) infection in the post-transplant period, necessitating routine surveillance for CMV. Some patients will not have CMV detected