



## Iatrogenic Kaposi's Sarcoma Following Treatment with Vedolizumab

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### INTRODUCTION

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 human immunodeficiency virus (HIV) who developed Kaposi's sarcoma on vedolizumab.

### CASE PRESENTATION

A 39-year-old homosexual male with a past medical history of Ulcerative Colitis (UC), proctitis, Hodgkin's lymphoma in remission and HIV presented to our hospital with complaints of abdominal pain, rectal pain, night sweats and chronic bloody diarrhea. He also described new tender lesions on his left foot. Mesalamine and long-term oral corticosteroids was previously prescribed without symptomatic relief and he was started on vedolizumab 2 months prior. On abdominal exam he had tenderness in the left lower quadrant and tender cervical and inguinal lymphadenopathy. Digital rectal exam revealed bloody mucoid stool. Dermatologic exam revealed dark macules on the sole of both feet and a darkened hyperkeratotic plaque on his left medial foot (**Figure 1 and 2**).



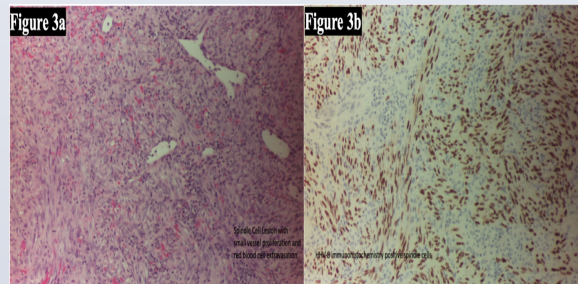
Figure 1

Figure 2

### Laboratory Values

WBC	12,600/mm <sup>3</sup>
Erythrocyte sedimentation rate	132 mm/hr
C-reactive protein	4.6 mg/dL
CD4	873 cells/mm <sup>3</sup>
HIV Viral load	50 copies per milliliter

He was managed with suppository hydrocortisone. Cervical lymph node biopsy was negative for malignant cells. A punch biopsy of the left foot mass showed atypical intradermal vascular and spindle cell proliferation positive for HHV-8 and for vascular marker CD34 (**Figure 3**). The results were consistent with the diagnosis of KS. Serology was also positive for HHV-8 PCR with high viral titers of 74 copies/mL.



Colonoscopy showed severe proctitis with deep ulcerations in a continuous and circumferential 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 (**Figure 4**).

He is currently doing well with no further complications.



Figure 4

### DISCUSSIONS

Vedolizumab is a monoclonal antibody which prevents the recruitment of lymphocytes to the inflamed tissue. Vedolizumab is approved for treatment of IBD and has shown efficacy and safety. KS was first described by Moritz Kaposi as a vascular tumor which mainly involves the skin but can affect any organ system. The iatrogenic form of Kaposi's sarcoma occurs in patients on immunosuppressive therapy, as this patient.

Patients with inflammatory bowel disease (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.

### REFERENCES

1. Chtourou, L., Ayedi, L., Rejab, H., Boudabous, M., Mnif, L., Grati, A., ... Tahri, N. (2017). Iatrogenic colorectal Kaposi's sarcoma complicating a refractory ulcerative colitis in a human immunodeficiency negative-virus patient. *Pathologica*, 109(4), 371-374.
2. Martin, R. W., 3rd, Hood, A. F., & Farmer, E. R. (1993). Kaposi sarcoma. *Medicine*, 72(4), 245-261.