Facial herpes vegetans in a person living with human immunodeficiency virus with undetectable viral load

To the Editor: Herpes vegetans (HV) is a rare manifestation of herpes simplex virus (HSV) seen patients with immunodeficiency, most in commonly in the setting of acquired immunodeficiency syndrome (AIDS),¹ but also in other states of severe immunocompromise such as malignancy and congenital immunodeficiencies.² HV classically presents in the anogenital region, but there are few reports in the literature documenting lesions in other areas, including the tongue and eyelids.^{2,3} Similarly, HV in immunocompetent patients living with human immunodeficiency virus (HIV) with undetectable viral load (VL) has not been well-documented. Hill et al⁴ reports a case of anogenital HV mimicking condyloma acuminata in a well-controlled HIV and renal transplant patient on multiple immunosuppressive agents. We present our case to highlight another instance of HV in a person living with HIV (PLWH) but in the setting of undetectable VL, with lesions in an atypical location, mimicking a neoplastic or infectious process.

A 51-year-old woman with a past medical history of asthma and gastroesophageal reflux disease presented to the emergency department with a 4-week history of a rapidly progressive, ulcerating nodule on the right nasal ala. The patient is a PLWH, well-controlled on bictegravir/emtricitabine/tenofovir alafenamide. The patient's VL was undetectable; her CD4+ cell count was 382 cells/ μ L. She reported adherence to antiretroviral therapy with no lapses in care. Physical examination was significant for a round, exophytic plaque abutting the right nasal opening, extending medially to the columella and inferiorly to the upper lip (Fig 1). Based on the patient's clinical presentation, a diagnosis of HV was suspected; other differential diagnoses included squamous cell carcinoma, blastomycosis, and other atypical infections.

A lesional punch biopsy revealed impetiginized, purulent scale crust and markedly inflamed granulation tissue with rare multinucleated cells, features suggestive of HSV infection; the immunohistochemical stain confirmed HSV-2 infection (Fig 2). The patient failed to respond adequately to high-dose oral valacyclovir, but topical imiquimod reduced the lesion's size by 50%. The patient is pending surgical evaluation, hoping to remove the residual plaque.

The first-line treatment for HV is acyclovir, valacyclovir, or famciclovir. Imiquimod, foscarnet, cidofovir, and vidarabine, administered either topically or intravenously, are alternative options in the case of unresponsiveness to initial antivirals, and surgical excision offers another alternative treatment for patients with single or a few small lesions.⁵ In our case, the patient responded poorly to valacyclovir and incompletely to imiquimod, necessitating referral for surgical intervention.

We present this case to emphasize that despite HV classically presenting in the anogenital region of severely immunocompromised patients, clinicians must consider HV on the differential for PLWH presenting with a verrucous plaque, irrespective of the lesion location or the patient's VL. HV may mimic neoplastic or atypical infections, and prompt identification of the correct diagnosis is essential for proper treatment and favorable outcomes.

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- *Key words: atypical HSV presentation; herpes vegetans; HSV in a person living with HIV; HSV mimicry; verrucous HSV.*

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Fig 1. Herpes vegetans (HV) presenting as a large, round, exophytic plaque abutting the right nasal opening.



Fig 2. A, A $10 \times$ magnification. Hematoxylin & Eosin (H&E) stained sections show markedly inflamed granulation tissue and overlying multinucleated epithelial cells. **B,** A $20 \times$ magnification. An immunohistochemical stain for HSV is positive in the epithelial cells.

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