

HERPES SIMPLEX VIRUS PSEUDOTUMOR IN AN IMMUNOCOMPROMISED PATIENT

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ABSTRACT

Background: HSV infections can characteristically present as pseudotumors in patients with uncontrolled HIV infection. Herpes simplex virus type 2 (HSV-2) infection rates range from 60% to 90% in individuals who are co-infected with HIV.

Case Presentation: A 48-year-old patient presented with a large fungating mass near her right inferior vulva with hardness and induration. The mass was 4 cm x 3 cm in size and was excised in the operating room. The pathology was negative for malignancy, however, it showed lymphoplasmacytic proliferation with immunostaining positive for HSV virus.

Conclusion: Any patient that presents with a tumor-like mass in their perineum should be screened for HSV lesions through biopsies to effectively rule out pseudotumors from neoplastic.

INTRODUCTION

Herpes Simplex Virus 1/2

- Causes significant morbidity in patients who are co-infected with HIV.
- HSV rates in HIV infected patients range from 60%-90% [3]
 - Higher risk of developing drug resistance HSV in people who are infected with HIV
- Commonly presents as orolabial lesions, genital or anal lesions in immunocompetent individuals. [5]
- In **immunocompromised individuals**, such as those infected with HIV, are more likely to present with disseminated, atypical or chronic HSV infection [2]
 - The recurrence and shedding of the virus is more frequent and severe
- Patients with HSV can be treated with acyclovir or valacyclovir and may also benefit from reduction in HIV viral load
- Patient with HIV should be frequently tested for HSV-2 infections and be offered educations and treatment options to reduce severity and morbidity from the infection [6]



CASE PRESENTATION

SUBJECTIVE:

48-year-old female with chief complaint of **urinary hesitancy** and pelvic pain that started about a week prior to coming to the ER. She complains of **pelvic mass on the right side** for which she had been taking antibiotics with no significant improvement in her symptoms.

PMHx significant for uncontrolled **HIV** and possible infection with **HSV-2** lesions

OBJECTIVE:

Physical Exam:

- large and fungating mass to the right inferior vulva with hardness and induration within the vaginal introitus and periurethral space
- Palpable suprapubic mass consistent with urinary retention

Procedure:

- Bedside
 - Attempt to place a foley catheter was made at bedside
 - Attempt was unsuccessful due to the obstruction from the fungating mass
- OR
 - Suprapubic catheter was placed in the OR
 - Biopsies of the fungating mass was performed and frozen sections were prepared
- Significant Labs:
 - CD4 count 104 cells/ μ L
 - Viral RNA HIV load of 211 copies/mL
- Imaging
 - CT scan showed induration of the right superficial vulva of 3.3 cm in AP by 1.3cm in transverse section
- Pathology
 - Negative for **malignancy**: CD-138, MUM01, CD20, D3, CD56, Cyclin D1 and kappa and lambda chains
 - Biopsy were consistent with lymphoplasmacytic proliferation and pseudoepitheliomatous hyperplasia with immunostaining positive for HSV virus.

ASSESSMENT

- HSV-2 pseudotumor Lesion consistent with reactivation of the HSV virus

PLAN

- Have the patient follow up with their infectious disease doctor for management of HIV and HSV-2
 - Recommended management could include ART therapy for HIV and prophylactic Valacyclovir for HSV-2 reactivation.

CONCLUSION

HSV pseudotumors present in patients with uncontrolled HIV infection. Any patient that presents with a tumor-like mass in their perineum should be screened for HSV lesions before exploring the diagnoses of a neoplastic process. Proper HIV treatment compliance can decrease the chance of pseudotumor presentations in patients who have latent/active HSV infection.

DISCUSSION

Acute HSV Infection causes infiltration of CD4+ and CD8+ cells to control the local HSV-2 infection



When the acute infection resolves and HSV lesion heals, the T-cells get trapped in the dermis and epidermis.



The CD4 cells that are trapped in the dermis express six times more CCR5 receptors on the surface than the average CD4 T-cells in the peripheral blood.



That relative increased number of CCR5 receptors effectively become a target become a target environment for CCR5 trophic HIV virus

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