

“IS AN OLD FOE MAKING A COMEBACK?”

•Eyob Tadesse MD¹; Samie Meskele MD¹; Ankoor Biswas MD¹
•Aurora Health Care, Milwaukee WI

INTRODUCTION

After being on the verge of elimination in 2000 in the United States, syphilis cases have rebounded. Rates of primary and secondary syphilis continued to increase overall during 2005–2013. Increases have occurred primarily among men, and particularly among men who have sex with men (MSM)(1). According to CDC report the incidence of primary and secondary syphilis during 2015–2016, increased 17.6% to 8.7 cases per 100,000 population, the highest rate reported since 1993(2). HIV and syphilis affect similar patient groups and co-infection is common(3). Syphilis may present with non-typical features in the HIV patient.

Syphilis is caused by spirochete *Treponema pallidum*. Its mode of transmission is sexual contact and untreated syphilis has several stages and poor outcome. Presentation of syphilis among HIV patients varies from classic presentation of primary or secondary syphilis to different presentation like malignant syphilis(4).

CASE REPORT

A 58-year-old African American female admitted to Aurora Sinai Medical Center with unintentional, unquantified weight loss of two months duration. She also had generalized, non-itchy body rash involving her palms and soles associated with hair loss for two months duration. The rash had started from her

abdomen gradually spread to her extremities, scalp, palms and soles. In association she had shortness of breath, vague abdominal pain and loss of appetite, history of multiple sexual partner, unprotected sex and prostitution. She was recently diagnosed with HIV but not started on treatment.

During her admission her vital signs were stable, she had pale conjunctivae, skin examination had demonstrated widespread macular and maculopapular skin lesions involving the whole body including palms and soles. She also had thin, fragile scalp hair and scalp hair loss without genital ulceration; other system examination was unremarkable.

On lab work up electrolyte, liver and renal function tests were within normal limits, her CBC showed hemoglobin of 9.2, hematocrit of 28.5 with normal MCV and elevated RDW, WBC was 2.9 K, with normal differential. She is reactive for HIV antigen and positive for HIV-1, CD4 count was 126. Rapid plasma reagin was 1:128, treponemal pallidum antibody was reactive, CNS VDRL was negative. Other work up for opportunistic infection including viral hepatitis(A,B,C), TB QuantiFERON gold, nuclear amplification test for chlamydia trachomatis, Neisseria Gonorrhoea, CSF cryptococcal antigen, toxoplasma IGG were negative, Abdominal MRI showed small hepatic hemangioma.

Patient was treated with benzathine penicillin(5) and discharged home to follow up with ART clinic.



DISCUSSION

Generally, syphilis presents in HIV infected patients similar to general population yet with some differences. Diagnosis is based on serologic test and microbiology. For serology, both non-treponemal antibody test, and specific treponemal antibody test should be used. Secondary syphilis in patients with HIV has varied skin presentation, which can mimic cutaneous lymphoma, mycobacterial infection, bacillary angiomatosis, fungal infections or Kaposi's sarcoma. In our patient, she was having diffuse maculopapular rash, involving palms and soles, significant hair loss, positive serology, and skin findings. She was treated for secondary syphilis with benzathine penicillin. **In newly diagnosed HIV, patients should be screened for other sexually transmitted infections, including syphilis.**

REFERENCES

1. Primary and Secondary Syphilis — United States, 2005–2013 *Weekly, May 9, 2014 / 63(18);402-406.* Monica E. Patton, MD¹, John R. Su, MD², Robert Nelson, MPH², Hillard Weinstock, MD² (Author affiliations at end of text)
2. CDC 2016 Sexually Transmitted Diseases Surveillance, Syphilis.
3. Paz-Bailey G, Meyers A, Blank S, Brown J, Rubin S, Brixton J, et al. A case-control study of syphilis among men who have sex with men in New York City. *Sex Transm Dis.* 2004;31:581–587. [PubMed]
4. Malignant Syphilis as an Initial Presentation of Underlying HIV Infection: A Case report, Ashok R Devkota, Rabindra Ghimire, Mirela Sam and Oo Aung, *BJMP 2015;8(2):a816*
5. Sexually Transmitted Diseases Treatment Guidelines, 2015 Kimberly A. Workowski, MD^{1,2} and Gail A. Bolan, MD¹