An Eye-Opening Presentation of Syphilis

Disclosure: The authors did not report any financial relationships or conflicts of interest

Click for Supplemental Video

Presenting Author: Natalie Anne Torrente, DO, MS, Internal Medicine Resident PGY2, Department of Medicine, UF Health, Jacksonville, Florida, Jacksonville, FL

Coauthors: Natalie Torrente, DO, MS, Internal Medicine, PGY2, UF Health, Jacksonville, FL; Jorge Verdecia, MD, Infectious Disease, PGY5, UF Health, Jacksonville, FL; Michael Sands, D, Professor, Infectious Disease, UF Health, Jacksonville, FL.

Introduction: Syphilis is a sexually transmitted disease caused by the spirochete Treponema pallidum subsp. pallidum. In 2015 the Center for Disease Control and Prevention (CDC) reported a 7.5 per 100,000 population of primary and secondary syphilis. In 2018, the cases of reported syphilis were the highest since 1991. The community with the highest risk of infection is men who have sex with men, which also has a higher incidence of human immunodeficiency virus (HIV) infection. Ocular syphilis manifestations occur in about 0.6-2% of all patients at any stage of the disease. The recent increased prevalence of ocular syphilis is due to the HIV epidemic. Studies have shown that the most common presentations of ocular syphilis are posterior uveitis or panuveitis.

Case Presentation: A 43-year-old Caucasian male with a past medical history of non-insulin dependent diabetes mellitus presented to the emergency room from a psychiatric facility complaining of left eye pain, redness and decreased vision for three weeks. The onset was gradual with progressively worsening and associated photophobia. The patient denied trauma or an inciting event, foreign body sensation, pain with eye movement, or colored halos. There was no history of fevers, sore throat, cough, genital or rectal lesions. He was homeless and living at a shelter facility. He has been sexually active for the past year with multiple partners, males and females. There was no recent travel history. The patient’s physical exam was unremarkable except for his ocular exam. His visual acuity was 20/100 in the left eye, the left pupil had a sluggish reaction and the intra-ocular pressure was 21 mmHg. The left conjunctiva/sclera had diffuse injection and follicles; the cornea was hazy with punctate epithelial erosions and mild edema. The anterior chamber had few inferior keratotic precipitates, cells 1+, flares 3+ and the iris had flat posterior synechiae. The patient was diagnosed with anterior uveitis of the left eye. His HIV serology was negative on repeated examination one month apart. He had a positive syphilis screen with an RPR 1:128. Computerized tomography of the head showed posterior placoid chorioretinitis. On lumbar puncture the CSF had a lymphocytic pleocytosis and slightly elevated protein. VDRL on the cerebral spinal fluid was reactive.

Final Diagnosis: He was diagnosed with neurosyphilis and anterior uveitis.

Management/Outcome: He was treated with intravenous penicillin G 24 million units via continuous infusion for 14 days, with rapid improvement of the eye, see figure #3. At the completion of intravenous therapy, he was given benzathine penicillin g intramuscular weekly for three weeks. For the anterior uveitis the patient was prescribed atropine TID and pred-forte QID as per Ophthalmology recommendations.

Learning Objectives:
- Describe the stages of syphilis
- Know how to treat neurosyphilis
- Recognize anterior uveitis in a patient