

Ocular Syphilis in San Mateo County

April 6, 2015

Two cases of ocular syphilis have been diagnosed in San Mateo County residents and at least 15 cases of ocular syphilis have been reported from California and Washington since December 2014. At least five other states have suspected cases under investigation. Affected persons have included both HIV infected and uninfected men who have sex with men as well as heterosexual men. Several of these cases have resulted in a significant and permanent decline in visual acuity, including blindness.

Providers should be on the alert for ocular syphilis and should order a syphilis serology test in patients with visual complaints who have risk factors for syphilis. Risk factors include having sex with multiple or anonymous partners, sex in conjunction with illicit drug use or having a sex partner who engages in any of these behaviors.

Patients with syphilis should be asked about changes in their vision and, if present, referred for immediate ophthalmologic evaluation. Persons at high risk for syphilis who present with ocular findings consistent with syphilitic disease should receive prompt therapy effective against central nervous system syphilis. Medical providers should initiate penicillin therapy in all patients in whom syphilis is suspected without waiting for laboratory confirmation of the diagnosis.

Ocular syphilis, a manifestation of neurosyphilis, can occur during any stage of syphilis including primary and secondary syphilis. Ocular syphilis can involve almost any eye structure, but posterior uveitis and panuveitis are most common. Additional manifestations may include anterior uveitis, optic neuropathy, retinal vasculitis and interstitial keratitis. Ocular syphilis may lead to decreased visual acuity and permanent blindness. While previous research supports evidence of neuropathogenic strains of syphilis, it remains unknown if some *Treponema pallidum* strains have a greater likelihood of causing ocular infections.

If possible, pre-antibiotic clinical samples (whole blood, primary lesions and moist secondary lesions, CSF or ocular fluid) should be saved and stored at -80 degrees Celsius for molecular typing. Contact Drs. Vivian Levy or Zenda Berrada for assistance with specimen shipment to CDC at 650.578.7118.

References:

- California STD Branch: Clinical Advisory regarding Ocular Syphilis in California dated March 13, 2015: <http://www.cdph.ca.gov/programs/std/Pages/default.aspx>
- Centers for Disease Control Prevention Clinical Advisory: Ocular Syphilis in the US dated April 3, 2015

Key Points

- SMC medical providers should be aware of ocular syphilis and screen for visual complaints in any patient at risk for syphilis
- Patients with positive serology and ocular complaints should receive immediate ophthalmologic evaluation
- Patients with suspected ocular syphilis should receive a lumbar puncture and be treated for neurosyphilis according to CDC guidelines regardless of lumbar puncture results (i.e. intravenous penicillin G for 10-14 days or intramuscular procaine penicillin plus oral probenecid for 10-14 days)
- All patients with syphilis should be tested for HIV if not already known to be HIV infected
- Report all cases to SMC Health Department within 1 business day at www.smchealth.org/std
- STD/HIV testing info available at www.smchealth.org/std

