

Images in Rheumatology

# Optic Perineuritis as the Initial Presentation of Syphilis in a Patient on Biologics

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Syphilis is a sexually transmitted disease caused by the spirochete *Treponema pallidum* and can affect any organ in the body including the eye or central nervous system.<sup>1</sup> Ocular involvement of neurosyphilis most frequently involves panuveitis but can also include retinal vasculitis, interstitial keratitis, or optic neuropathy.<sup>2,3</sup>

Immunosuppression is a significant risk factor for the development of neurosyphilis, with human immunodeficiency virus–positive patients being significantly at risk.<sup>1</sup> Biologics are immunosuppressants and have been implicated in cases of syphilis.<sup>4,5</sup>

We present an unusual case of neurosyphilis presenting with ocular symptoms in a patient with a history of biologic use. The patient is a 30-year-old female with ankylosing spondylitis (AS) who had been taking adalimumab for a year. She presented with a 2-week history of right eye floaters. Visual acuity was 20/20 bilaterally, with no evidence of anterior or vitreous chamber inflammatory reaction. Fundus photography (Figure) revealed right-sided edematous optic nerve head and normal left-sided optic nerve. The remainder of the patient's ocular and neurological exams with a neurologist was normal. Magnetic resonance imaging/computed tomography of the head and orbits were both reported with no intracranial findings; however, there was evidence of bilateral lymph node involvement, most prominently in the posterior

cervical chains. The syphilis rapid plasma reagin was elevated at 1:64, and the lumbar puncture cerebrospinal fluid was reactive with Venereal Disease Research Laboratory ratio of 1:2 and elevated white cells. The patient was diagnosed with neurosyphilis and was treated with intravenous penicillin G for 14 days. Upon completion, the patient confirmed that visual symptoms had improved; fundus photography was normal at 4 months' follow-up.

This case highlights the importance of considering syphilis in the differential diagnosis in an immunocompromised patient presenting with unusual ocular symptoms, including those patients taking immunosuppressant drugs.

## REFERENCES

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Figure. Bilateral fundus photos demonstrating right (left panel) edematous optic nerve and normal left (right panel) optic nerve in a patient with neurosyphilis with a history of biologic use.