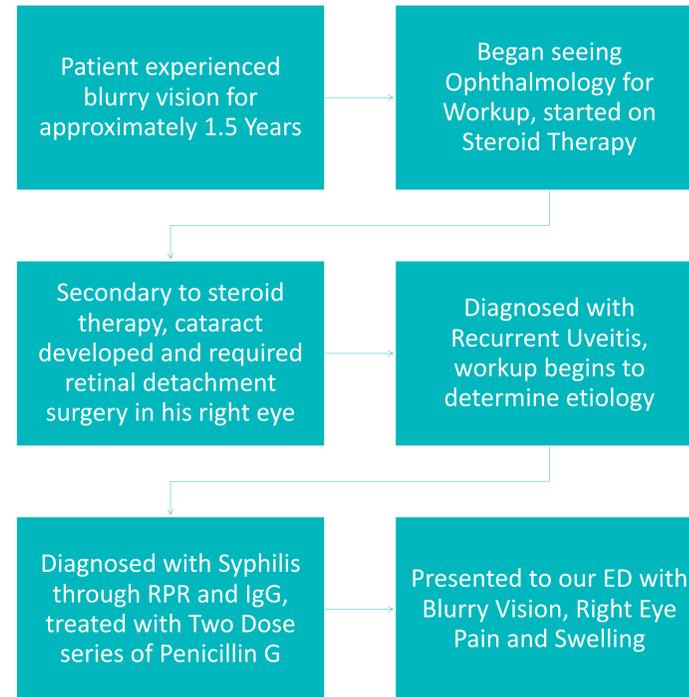


## Timeline Before Patient Presentation



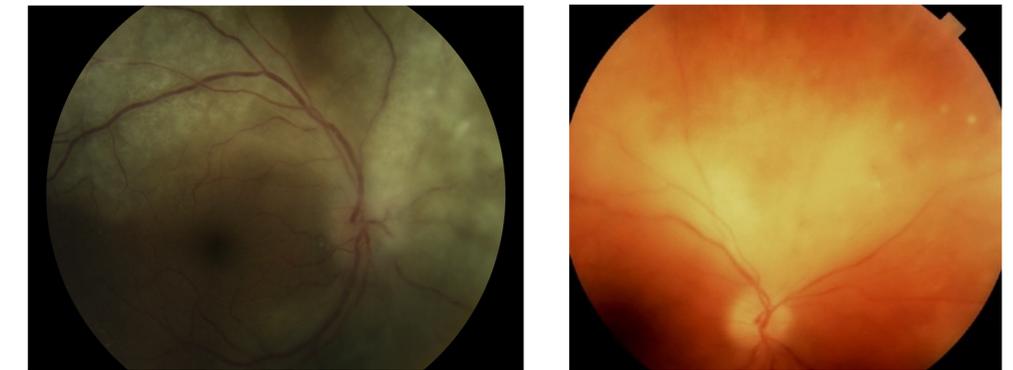
## Abstract and Introduction

**Abstract:** Uveitis is a heterogeneous group of intraocular inflammatory diseases that can lead to vision loss if not promptly diagnosed and managed. Syphilis, a sexually transmitted infection caused by *Treponema pallidum*, can manifest with various clinical presentations, including uveitis. We present a case of uveitis secondary to syphilis in a 31-year-old male. The clinical features, diagnostic workup, treatment, and visual outcome are discussed, emphasizing the importance of considering syphilis as an underlying etiology in patients presenting with uveitis.

**Introduction:** Uveitis is characterized by inflammation of the uveal tract of the eye, which includes the iris, ciliary body, and choroid. It can be classified into anterior, intermediate, posterior, or panuveitis based on the location of inflammation within the eye. Syphilis is a systemic infectious disease caused by *Treponema pallidum* and can lead to a wide range of clinical manifestations, including uveitis. Prompt recognition and treatment of uveitis secondary to syphilis are crucial to prevent ocular complications and ensure optimal visual outcomes.

## Patient Presentation

A 31-year-old male with a history of high-risk sexual behavior who presented to the Emergency Department with chief complaint of swelling in his right eye, blurry vision, and pain. Patient noted intermittent blurry vision for approximately 1.5 years before presenting to ophthalmology. While ophthalmology was determining the etiology behind his blurry vision, he was initiated on high-dose steroid therapy for symptom relief. Patient eventually developed a cataract from prolonged steroid therapy and required retinal detachment surgery in his right eye. Patient was eventually diagnosed with recurrent uveitis and found to be positive for syphilis through both IgG and RPR. Patient had continued symptoms after the typical 2 dose IM Penicillin G. Patient was informed that he was considered a treatment failure and needed to be evaluated in the hospital for workup of possible neuro-syphilis and treatment for ocular syphilis. Infectious disease was consulted and found that the patient had been recently diagnosed with HIV through an outlying public health department. Infectious disease started IV Penicillin G 4,000,000 units q4 hours for 14 days. Neurology was consulted for suspicion of neurosyphilis, and a lumbar puncture was performed to assess for VRDL in Cerebral Spinal Fluid (CSF) and he was found to be negative for VRDL in CSF, showing no evidence of acute neurosyphilis. MRI head with orbits was completed which showed possible retinal detachment. Patient was seen by ophthalmology who agreed with the treatment plan, and added symptom relief with difluprednate drops, dorzolamide-timolol drops, and prednisolone acetate drops. Patient by last day of hospitalization had significant improvement of symptoms and was discharged with PICC line to continue Penicillin G therapy outpatient with close follow-up with ID, neurology, and PCP.



**Figure 1.** Examples of Uveitis in patient with Syphilis. Images courtesy of American Academy of Ophthalmology

## Conclusion

- Ocular manifestations of syphilis are quite common and are associated with any stage in the disease process, including neurosyphilis<sup>1</sup>. A confounding factor is that this patient is also HIV positive, which is also associated with uveitis<sup>2</sup>. There have been case reports of monocular uveitis as the singular presentation of syphilis<sup>34</sup> but are relatively rare in occurrence through literature search. Syphilis is an easily treated sexually transmitted infection<sup>5</sup>, and its complications can result in permanent blindness if not recognized and treated appropriately.

## References

- Koundanya VV, Tripathy K. Syphilis Ocular Manifestations. In: StatPearls. StatPearls Publishing; 2023. Accessed July 31, 2023. <http://www.ncbi.nlm.nih.gov/books/NBK558957/>
- Yang M, Kamoi K, Zong Y, Zhang J, Ohno-Matsui K. Human Immunodeficiency Virus and Uveitis. *Viruses*. 2023;15(2):444. doi:10.3390/v15020444
- Yıldız Balcı S, Turan Vural E, Özçalışkan Ş. Intermediate Uveitis as the Initial and Only Presentation of Syphilis. *Turk J Ophthalmol*. 2019;49(5):297-299. doi:10.4274/tjo.galenos.2019.72558
- Harford DA, Green Sanderson K, Stephenson KAJ, Murphy CC. Monocular syphilitic uveitis. *BMJ Case Rep*. 2021;14(2):e241403. doi:10.1136/bcr-2020-241403
- Zhang T, Zhu Y, Xu G. Clinical Features and Treatments of Syphilitic Uveitis: A Systematic Review and Meta-Analysis. *J Ophthalmol*. 2017;2017:6594849. doi:10.1155/2017/6594849

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