Greater Masquerade: A Retrospective analysis on the presentation of ocular syphilis

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Background

- Ocular syphilis, a recognized manifestation of Treponema pallidum, emerges as a diagnostic challenge within ophthalmology.[1,2]
- The diversity of its manifestations, including uveitis, retinitis, optic neuritis, and vasculitis, can potentially delay diagnoses. Timely management is paramount to preventing severe sequelae.[3,4]
- We aimed to better understand the presenting features of ocular syphilis in patients presenting to the Western Eye Hospital.



Fig1: A patient with neuro-syphilis with typical placoid fundal lesions and optic neuritis, acute anterior uveitis and cystoid macular oedema.

Methods

- Retrospective audit from January 2010 to December 2023
- Review electronic records of patients with documented ocular syphilis diagnoses at the Western Eye Hospital.
- Data collected: presenting symptom, ocular findings at presentation, visual acuity, initial clinical diagnoses, time from presentation to final diagnosis, and presence or absence of documented sexual history.

Results

- 10 patients had a documented diagnosis of ocular syphilis (median age: 60 [48-87] years). Six out of the eight patients did not receive the correct diagnosis or investigations at their first visit. (Fig. 3)
- Mean time to formal diagnosis - **55.1 days (±75.8)**,
- Two out of eight patients had a documented sexual history. Presenting symptoms included headache, visual disturbances, and painful eyes.
- Presenting ocular findings: anterior uveitis, vitreous haemorrhage, non-specific retinal changes and optic neuritis

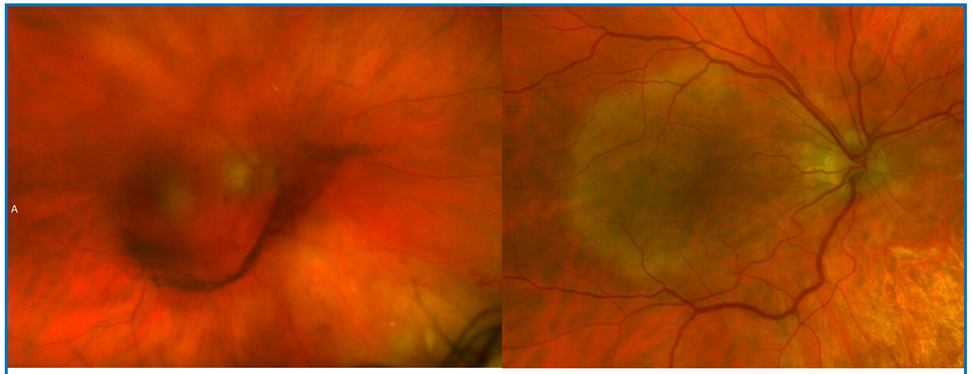
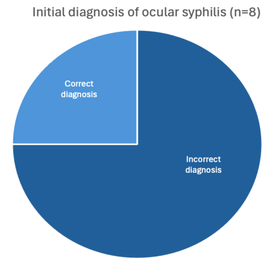


Fig 2: The right picture shows a patient presenting with a vitreous haemorrhage. An urgent vitrectomy was performed to investigate for a retinal tear. The left picture shows a typical placoid fundal lesion was seen post-operatively and the patient was subsequently diagnosed with ocular syphilis.

Fig. 3



Correct and incorrect initial diagnosis of ocular syphilis (n=8)

Discussion

The heterogeneity of clinical phenotypes, such as uveitis, hemorrhaged, retinopathies, and optic nerve pathology, demands that ophthalmologists keep syphilis in mind as a differential diagnosis. This is particularly pertinent when considering presentations in older patients who may be overlooked as low risk. This is supported by our data in which the median age of presentation was 60 years old with patients in the 8th and 9th decade being diagnosed with ocular syphilis. Further analysis regarding the consequences of misdiagnosis is warranted, as prompt diagnosis and treatment can prevent adverse outcomes.[3,4]

References

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