

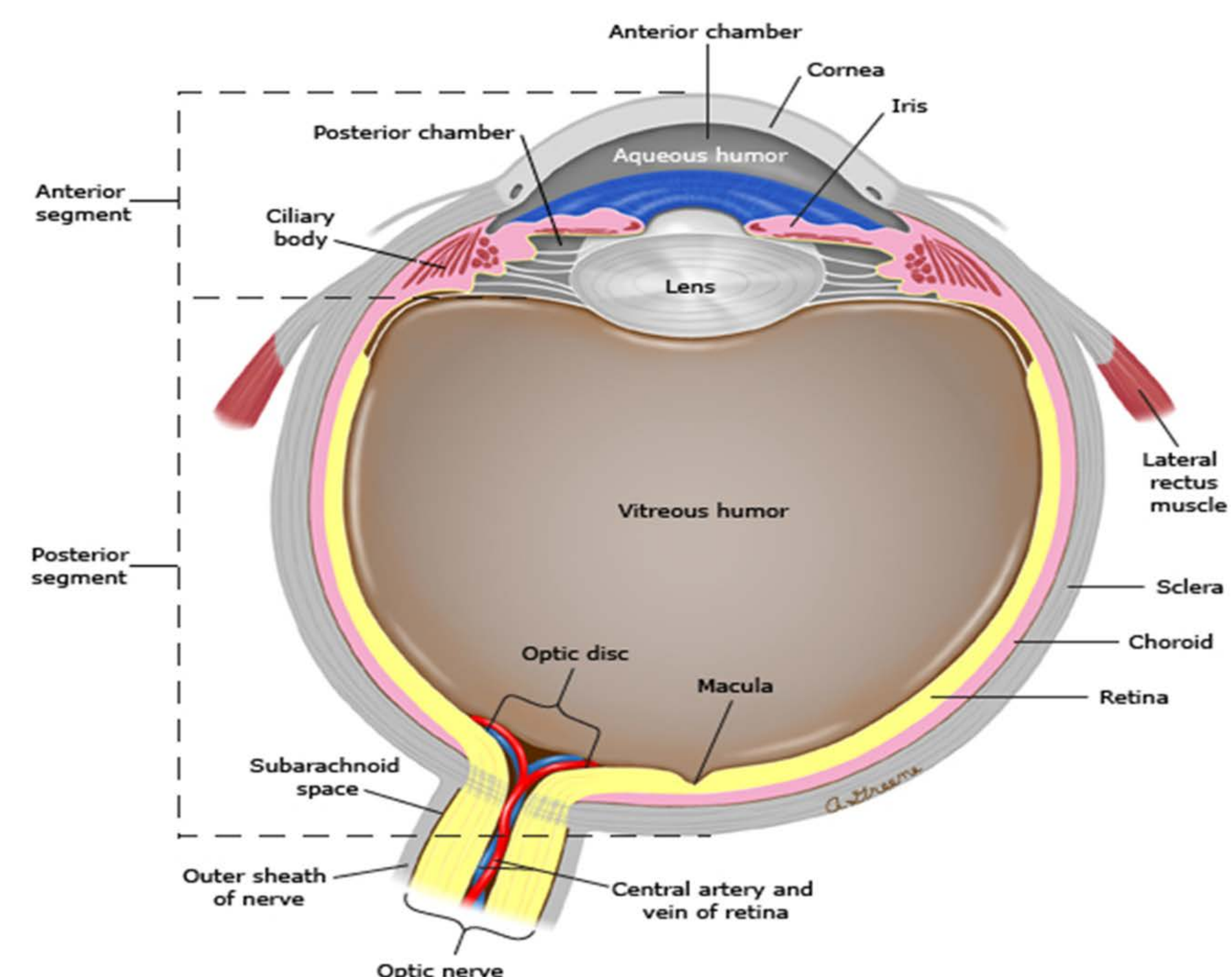
Title: A Case Study on Toxoplasmosis: Ocular Disease

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Introduction

Toxoplasmosis is an infection caused by the protozoan parasite *Toxoplasma gondii*. Primary infection by this organism is usually asymptomatic. Some immunocompetent patients infected with this parasite can present as an acute systemic infection but symptoms can also present as ocular disease.

In these instances, the ocular disease may be the only symptom, and can be from either an acute infection or a reactivation of the disease.



Case Study

Patient is a 60 year old male that presented for follow up after seeing his ophthalmologist. Patient was originally seen for vision loss in the right eye. At his last visit he reported a small blind spot in the lower center of the right eye. This was noted after trauma to that eye 1 month prior to this visit. The vision loss was progressing and now includes 40% of the lower visual field from the right eye. He also reported a generalized headache as his vision significantly worsened. He was reevaluated by his ophthalmologist and found to have optic nerve edema with leakage on angiogram. Based on these findings, there was concern for ischemia optic neuropathy or optic neuritis. Patient underwent extensive testing for further evaluation including: carotid duplex, EKG, echocardiogram, MRI of brain. ESR, CRP, CBC, Lyme's titers, TB, toxoplasmosis, and sarcoidosis.

Management and Outcome

Patient underwent extensive testing for further evaluation. MRI of brain was unremarkable, EKG was normal, and Carotid Doppler showed no significant stenosis. Patient was positive for toxoplasma IgG antibodies indicating a past infection. Labs were otherwise unremarkable. Due his vision loss patient was started on 8 weeks of Bactrim for possible toxoplasmosis. Four weeks later there was no improvement on antibiotic and patient now completely loss vision in his right eye. Patient is continuing to see Ophthalmology and other causes are being considered including ischemic disease.

Discussion

Toxoplasmosis is not an uncommon disease. It is estimated that 11% of the population in the US between the ages of 6-49 are seropositive for *T. gondii*. Toxoplasmosis Ocular disease usually presents with posterior uveitis, starting in the retina. Patients with reactivation of previous infection present with scar from previous infection and new retinal lesions. Neuroretinitis from toxoplasmosis is more common in pediatric patients but when present in patient >40 there is a higher risk of recurrent disease. This is treated with Bactrim for minimum of 6 week of the patient.. Steroids are considered if there is significant inflammatory changes. This condition is usually resolved in 1-2 months. In this case, patient was positive for IgG indicating past infection and therefore started on the appropriate treatment, but patient continued to loss vision. With failure of antibiotic therapy further evaluation is needed. Patient should continue to follow with ophthalmologist explore ischemia and embolic causes.

Conclusion

Toxoplasmosis is not as uncommon as many believe it to be. It may present with systemic infection but can also present with only ocular symptoms. Toxoplasmosis may be recurrent in the patients >40 years old. Recurrent infections would not show IgM antibodies. Even though the specialist are now considering other causes the suspected infection was treated appropriately illustrating the importance of considering less common causes of disease.



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