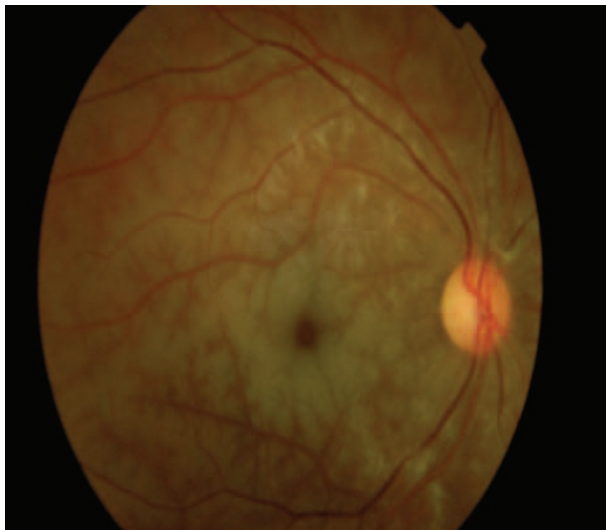


Sir,  
**Pneumocystis choroiditis**

Pneumocystis choroiditis is a marker of disseminated Pneumocystosis and was mainly noted in patients who were on aerosolized pentamidine as prophylaxis for Pneumocystis pneumonia (PCP). To our knowledge, this is the first atypical case of Pneumocystis choroiditis while on cotrimoxazole prophylaxis for PCP.

**Case report**

A 35-year-old Zambian woman, diagnosed with HIV, attended eye casualty with sudden painless loss of vision in her right eye (RE). She was variably compliant with antiretroviral therapy and was also taking low-dose cotrimoxazole (480 mg OD) as prophylaxis against recurrent PCP. A week before presentation, she had flu-like symptoms and a non-productive cough, and was commenced on amoxicillin by her general practitioner. She was otherwise systemically well. Snellen acuity was recorded as CF OD and 6/6 OS. Anterior segment was unremarkable. There was no relative afferent pupillary defect. RE fundus revealed pale yellow placoid choroidal lesions largely affecting the posterior pole but also involving the nasal and temporal periphery as far as the equator (Figure 1). There was no evidence of vitritis or retinal vasculitis. Left eye examination was normal. Viral load was noted to be 5900 and CD4 count was 162. Chest radiograph, VDRL, and Mantoux tests were reported to be normal. On the basis of fundal appearance and earlier history of PCP, we made a presumptive diagnosis of Pneumocystis choroiditis. She was immediately commenced on high dose cotrimoxazole 1920 mg tds. At 3 weeks, the choroidal lesions were resolving, and after 2 months, the lesions resolved completely with significant improvement in her peripheral vision, although her central vision remained unchanged.



**Figure 1** Fundus RE; pale yellow placoid choroidal lesions at posterior pole. Macula shows a 'cherry red spot' appearance due to the pallor of the lesions surrounding the fovea.

**Comment**

Pneumocystis pneumonia is caused by yeast-like fungus called *Pneumocystis jirovecii*<sup>1</sup> (originally known as *Pneumocystis carinii*). *P. jirovecii* primarily affects the lungs, but extrapulmonary infections result from dissemination to other organs including eyes. It is estimated that in the pre-HAART era, 1% of AIDS patients with a CD4 below 200 cells/l had Pneumocystis choroiditis.<sup>2</sup> This condition was mainly diagnosed in patients who were on aerosolized pentamidine as prophylaxis against PCP. Inhaled prophylaxis was then considered as a risk factor for dissemination, and its use was constrained by CDC in 1989.<sup>1</sup>

In 1991, Shami *et al*<sup>3</sup> reported 76% cases to be bilateral. Characteristic features include round yellow-white flat choroidal lesions mainly in the posterior pole, unifocal or multifocal ranging from 2 to 50 per eye. Few develop visual symptoms despite having extensive choroidal lesions.<sup>4</sup>

Differentials, such as syphilis, tuberculosis, and cryptococcus choroiditis, were also considered, but there were no signs of disc swelling or vitritis. As Pneumocystis choroiditis is suggestive of dissemination, the recommended treatment remains cotrimoxazole, given at a total daily dose of 20 mg/kg of trimethoprim and 100 mg/kg of sulphamethoxazole in 2–4 divided doses, either intravenously or orally for 21 days followed by continuous prophylaxis.<sup>4,5</sup> The second-line therapy is intravenous pentamidine, at a daily dose of 4 mg/kg for 21 days.

This case highlights the importance of an early ophthalmic examination to allow appropriate systemic therapy to be instituted before widely disseminated infection results in a fatal outcome. This could potentially help those treating patients with HIV by making them aware of the potential for dissemination of pneumocystis to the eye while on cotrimoxazole prophylaxis.

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