

'The initial VA acuity is a good predictor of the final VA acuity'—this is unquestionable. Hence, by relying on the initial VA acuity, instead of dismissing it from the scoring system, we preferred to downscale the amount of points scored for initial VA. We halved the effect of initial VA on prognosis by means of using additional factors such as the age and the zone of injury. We developed POTS in order to obtain information on prognosis immediately after the trauma in patients whose initial VA could not be obtained. The replacement of the OTS by POTS is a too ambitious expectation at present. Multicentered, prospective studies with larger patient groups are required to obtain the objective evidence to replace the OTS by another scoring system.

We think that there is an exact need for a new ocular trauma score for preverbal pediatric patients, whether ours or of another study. Our study is an attempt to fill in the missing aspect of the scoring system; we appreciate any suggestion to improve it.

Conflict of interest

The authors declare no conflict of interest.

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Sir, A therapeutic challenge in AIDS-associated viral retinitis

Progressive outer retinal necrosis (PORN) is a herpetic retinitis characterized by multifocal deep retinal lesions progressing to confluent necrosis and a high likelihood of retinal detachment. The visual prognosis in patients with PORN is extremely poor, with final visual acuity of no light perception reported in up to 67% in some series.^{1,2} We report a therapeutic challenge of AIDS-associated viral retinitis in which the ganciclovir implant contributed to the eradication of PORN recalcitrant to systemic and intravitreal antivirals.

Case description

A 49-year-old male patient with HIV/AIDS (CD4 32 cells/ μ l), *Pneumocystis jiroveci* pneumonia, and

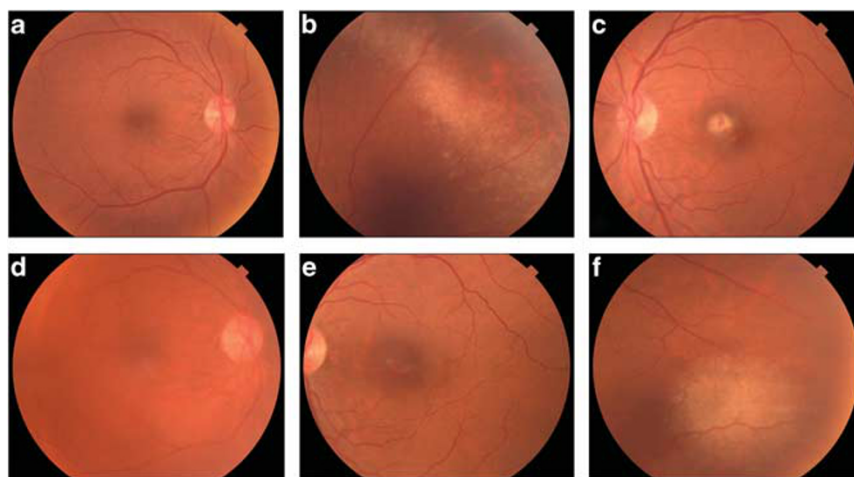


Figure 1 Fundus photograph shows normal posterior pole (a) and multifocal, white retinal opacities involving the retinal periphery OD. Anterior to these retinal lesions, there is an area of retinal pigment epithelium atrophy (b). Fundus photograph of the macula OS shows parafoveal retinal whitening with a spot of retinal hemorrhage (c). The patient's findings initially improved, following valganciclovir therapy and intravitreal foscarnet. However, after reducing the valganciclovir dosage, he returned with increased vitreous cell and haze OD (d). Although the posterior pole findings OS had improved (e), there were large confluent areas of retinal opacification consistent with progressive outer retinal necrosis. Aqueous PCR was positive for VZV DNA (f).

Mycobacteria avium intracellulare lymphadenitis, presented with blurred vision OU. He denied an earlier history of shingles or herpetic oral, or genital ulcers. Visual acuities (VA) were 20/30 OU. Retinal whitening involving the peripheral retina OD and macula OS was observed (Figures 1a–c). A presumptive diagnosis of CMV retinitis was made, and valganciclovir 900 mg bid with intravitreal foscarnet (2.4 mg/0.1 cc) was initiated. Over 6 weeks, the retinitis improved with serial intravitreal foscarnet (four injections OD, seven injections OS). The valganciclovir was reduced to 900 mg per day due to myelosuppression.

One week later, the patient's VA declined to 20/50 OD and 20/40 OS, with increased vitreous haze OD and retinitis progression OU (Figures 1d–f). Intravitreal foscarnet 2.4 mg/0.1 cc and ganciclovir 2 mg/0.1 cc were administered OU, and intravenous ganciclovir 5 mg/kg was initiated following infectious disease consultation. Aqueous PCR OS demonstrated varicella-zoster virus (VZV) DNA, establishing the PORN diagnosis. HAART therapy utilizing efavirenz/emtricitabine/tenofovir (Atripla, Bristol-Myers Squibb & Gilead Sciences, LLC, Foster City, CA, USA) was also recommended, but the patient reported poor adherence to the medication, and the CD4 count varied between 32–50 cells/ μ l during the first 6 months of follow-up.

A rhegmatogenous retinal detachment developed at 3 months follow-up, prompting scleral buckle, vitrectomy, endolaser, and silicone oil tamponade OD. Laser retinopexy of 360° was performed OS. The retinitis continued to progress, prompting ganciclovir implants OU; over the ensuing 2 months, the retinitis completely resolved. At 10-months follow-up, VA's were 20/200 OD and 20/50 OS, without disease recurrence. The patient's CD4 count eventually improved to 215 cells/ μ l on HAART.

Comment

Initially described in HIV/AIDS, PORN is most commonly attributed to VZV.¹ PCR diagnostic testing of aqueous and vitreous fluid provides a rapid and highly sensitive method of determining the precise etiology of viral retinitis, particularly in atypical or recalcitrant cases, and may influence the choice of antiviral therapy.^{3,4} Quantitative PCR of VZV DNA from aqueous fluid has been used successfully to monitor a patient's clinical course and may also be beneficial in these challenging cases.⁵

Therapies utilized for PORN traditionally have included long-term systemic antivirals;^{2,3,6} Moorthy *et al*⁶ previously described more favorable outcomes with intravenous foscarnet and/or ganciclovir compared with acyclovir monotherapy. More recently, the addition of intravitreal ganciclovir and foscarnet to systemic antiviral therapy has been associated with preservation of visual acuity, albeit infrequently.^{7,8} Although these limited studies support combination systemic and intravitreal antiviral therapy for the treatment of acute herpetic retinitis,^{7,8} this algorithm failed to eradicate the disease activity in our patient. Longer-term strategies, particularly in recalcitrant disease, require further study. Consideration of the ganciclovir implant in these situations may be warranted.

Conflict of interest

The authors declare no conflict of interest.

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