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Comparing treatment of acute retinal necrosis with either oral valaciclovir or intravenous aciclovir

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Abstract

Purpose: To compare the visual outcomes of patients with acute retinal necrosis (ARN) treated initially with intravenous aciclovir versus oral valaciclovir therapy.

Design: Retrospective, comparative, interventional case series.

Methods: 62 patients (68 eyes) with ARN, treated at Moorfields Eye Hospital (United Kingdom) between 1992 and 2016, were identified through the hospital's electronic database. Exclusion criteria included insufficient patient records or follow-up (<150 days). 56 patients had unilateral ARN, while 6 had bilateral ARN. Patients who received intravenous aciclovir on diagnosis (n=33) were compared with patients treated with oral valaciclovir (n=29) across outcomes including best corrected visual acuity, retinal detachment, severe vision loss and other complications. The impact of adjunctive intravitreal antiviral and prophylactic barrier laser treatment was also assessed.

Results: Change in best corrected visual acuity was not significantly different for eyes treated initially with intravenous therapy versus oral therapy over 5 years of follow-up data (p=0.16). There was no difference in the rates of severe vision loss between the two groups (46% and 59%, respectively, p=0.18), or of those eyes retaining good vision (28% vs. 31%, respectively, p=0.80). Retinal detachment occurred in 63% of cases and did not differ across treatment groups (62% vs. 66%, respectively, p=0.67). Barrier laser and intravitreal therapy had no effect on retinal detachment rate in either group.

Conclusion: Oral valaciclovir is clinically equivalent to intravenous therapy in the management of ARN. Oral valaciclovir as an outpatient therapy—with or without intravitreal foscarnet—can therefore be considered as an acceptable alternative to inpatient therapy required for intravenous treatment.