Clinical outcomes in cytomegalovirus-positive posner-schlossman syndrome patients treated with topical ganciclovir therapy
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PURPOSE: To evaluate the clinical characteristics and therapeutic outcomes of cytomegalovirus (CMV)-positive Posner-Schlossman syndrome patients undergoing topical ganciclovir treatment.

DESIGN: Retrospective, comparative, and interventional case series.

METHODS: One eye of each of 126 consecutive Posner-Schlossman syndrome patients was investigated using aqueous polymerase chain reaction (PCR) between January 2006 and June 2013. The initial presentations and follow-up data of the CMV-positive patients (68 eyes) and CMV-negative patients (58 eyes) were compared.

RESULTS: Severe endothelial cell loss (P < .001) and a higher number of eyes requiring glaucoma filtering surgery (P = .017) were observed in CMV-positive Posner-Schlossman syndrome patients. All CMV-infected eyes treated with continual topical 2% ganciclovir exhibited an undetectable CMV level at the following taps. During follow-up, the average number of antiglaucomatous agents decreased, and a similar frequency of intraocular pressure (IOP) spikes was observed in both groups (P = .358). Patients with CMV-positive eyes with a disease duration over 5 years were likely to require glaucoma surgery (P = .024, log-rank test). All patients receiving surgery exhibited CMV-negative PCR during the IOP attack, but experienced severe peripheral anterior synechiae and pigment clogging. Both groups exhibited a similar endothelial cell decrease (P = .243) and probability of progressive endothelial cell loss (P = .219, log-rank test).

CONCLUSIONS: Ganciclovir treatment was effective for clearing the viral load, assisting the IOP control, and preserving the corneal endothelium of CMV-positive Posner-Schlossman syndrome patients. Early diagnosis and proper treatment could decrease the risk of advanced glaucoma and avoid glaucoma surgery in long-lasting cases.

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