

Management challenges of recurrent cytomegalovirus endotheliitis: a case study

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ABSTRACT

Recurrent cytomegalovirus (CMV) endotheliitis may lead to irreversible corneal damage, therefore early recognition and vigilant management is necessary. A 75-year-old gentleman had bilateral advanced primary open-angle glaucoma done trabeculectomy, on long term topical steroid and bilateral pseudophakia. In June 2017, he had right eye blurred vision associated with red eye, cornea oedema and anterior uveitis. CMV endotheliitis was diagnosed after a positive CMV polymerase chain reaction (PCR) in aqueous tap, taken at 8 months after recurrent exacerbations of keratouveitis despite treatment. Treatment with topical ganciclovir gel 0.15% and intensive dexamethasone successfully alleviated the symptoms. Medications were stopped at fourth month, but topical dexamethasone was kept at twice daily to minimize bleb failure. 16 months later, second episode of CMV endotheliitis occurred. Topical ointment ganciclovir 0.15% was initiated, aqueous tap at fourth month confirmed negative CMV PCR, yet treatment was maintained for 18 months. A third episode occurred nineteen months after treatment cessation. Due to financial constraints, treatment shifted to 2% ganciclovir drops, initially effective but subsequently vision deteriorated after 5 months. Ointment ganciclovir 0.15% was restarted however vision remained static. The latest CMV PCR test remained positive with lower viral load (158 IU/ml) despite treated for eleven months. CMV endotheliitis should be suspected early with non-resolving keratouveitis especially in patients on long term topical steroids. This case highlights the complexities in managing recurrent CMV endotheliitis, particularly on the duration of antiviral therapy. Ointment ganciclovir 0.15% showed more effective than ganciclovir 2% drops in this case.