

Approach to recurrent CMV disease and antiviral resistance

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Dear Editor,

We appreciate the opportunity to further discuss our recent report on recurrent cytomegalovirus (CMV) retinitis in a non-HIV patient [1], in particular to respond to the interest and letter from Dr. Wiwanitkit, who asked us to address our approach to recurrent CMV disease and antiviral resistance.

Presently, our patient remains disease-free, without evidence of retinitis or viremia. Favorably, she has not required further immunosuppression for the past 25 months. Treatment with high-dose (~5,000–6,000 mcg/dose) GCV injections provided adequate local concentrations to inhibit/control ocular infection. We suspect that lack of recurrent CMV disease is indicative of development of CMV-specific immunity. Our patient, in particular, experienced primary CMV infection with a high viral load during a period of intense immunodeficiency. Systemic antiviral therapy failed to suppress viremia and likely contributed to resistance. Viral clearance paralleled the rise in CD4 T lymphocytes [1]. Although CD4 T lymphocyte recovery suggests immune reconstitution, CD4 count recovery is not always

associated with development of CMV-specific immunity, as demonstrated in an AIDS patient by Johnson et al. [2] and noted by Dr. Wiwanitkit.

Among HIV patients, the best strategy to prevent CMV disease is early HAART, which has been associated with a marked decline in the incidence of CMV in this population. CMV drug resistance today primarily impacts solid-organ transplant recipients. We agree with Dr. Wiwanitkit that optimal treatment of drug-resistant CMV disease is limited and new agents are needed. Our case suggests that supra-pharmacologic dosing of antivirals can be effective for treatment of retinitis due to drug-resistant CMV.

References

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