20

Foscarnet-resistant Herpes Simplex Virus (HSV) Infections in Patients with AIDS. S. Safrin, S. Kemmerly, B. Plotkin, T. Smith, N. Weissbach, D. De Veranez, L. Phan, D. Cohn. University of California, San Francisco CA; Ochsner Medical Institution, New Orleans LA; Minor & James Medical Center, Seattle WA; University of Washington, Seattle WA; St. Vincent's Health Center, Erie PA; Sutphin Medical Associates NY; University of Colorado Health Sciences Center, CO.

We describe six AIDS patients with HSV infection that was unresponsive to therapy with foscarnet or occurred while receiving daily therapy with foscarnet. In each patient we documented *in vitro* resistance to foscarnet ($ID_{50} \geq 100$ ug/ml; mean ID_{50} of foscarnet-susceptible reference strain $= 35 \pm 9$ ug/ml). Five had received prior foscarnet therapy (40 mg/kg every 8 hours) for acyclovir-resistant HSV infection, of whom 4 had received daily suppressive therapy with foscarnet (40 mg/kg/d). A sixth patient developed foscarnet-resistant HSV infection while receiving daily foscarnet to suppress cytomegalovirus retinitis infection (90 mg/kg/d). *In vitro* susceptibility to acyclovir ($ID_{50} \leq 2$ ug/ml) was present in 7 of 11 foscarnet-resistant HSV isolates from 6 patients; in 4 the substitution of acyclovir for foscarnet or the addition of acyclovir to foscarnet resulted in healing. Ganciclovir susceptibility *in vitro* closely paralleled that of acyclovir (Spearman correlation coefficient 0.8; $p = .02$) but was somewhat less active in all (ID_{50} 0.5-7 ug/ml). *In vitro* susceptibility to vidarabine ($ID_{50} < 30$ ug/ml) was present in all foscarnet-resistant isolates, but therapy with vidarabine in 1 patient failed to induce healing. We conclude that treatment of patients with foscarnet-resistant HSV lesions with acyclovir may represent a viable management strategy, particularly while awaiting the results of *in vitro* susceptibility testing to further guide therapy.