Wednesday April 13

Oral Session IV
Enzymatic Targets and Clinical Trials

Prophylactic Therapy with Oral Acyclovir (ACV) for Experimental Ultraviolet (UV) Light-Induced Herpes Simplex Labialis. S.L. Spruance, M.B. McKeough and G. Wenerstrom. U. of Utah, Salt Lake City, Utah.

We have previously shown that prophylactic oral ACV effected a 73% reduction in the frequency of sun-induced herpes labialis among skiers (ICAAC 1986). ACV had a marked benefit in the last half of the 7 day treatment period but was ineffective initially. Under controlled conditions in the laboratory, 30 volunteers were exposed to UV light on one quadrant of their lips and treated with ACV or placebo 200 mg 5x/day for 7 days, beginning immediately after UV light exposure. 3/15 (20%) ACV recipients and 4/15 (27%) placebo subjects developed lesions. All of the lesions in the ACV group developed in the first 24 hours. 33 additional volunteers took oral ACV or placebo (200 mg 5x/day) for 14 days beginning 7 days before irradiation. 3/18 (17%) ACV recipients developed lesions, all within 24 hours, while 9/18 (50%) placebo patients experienced lesions 66-96 hours after UV light exposure. For the combined experience, the frequency of lesions in the ACV groups (6/33, 18%) was lower but not significiantly different than in placebo subjects (13/33, 39%, p=0.10) 15/19 (79%) induced lesions were virus culture-positive. Prophylactic ACV does not appear to prevent a subgroup of "early" UV-induced herpes labialis lesions occurring within 24 hours of the stimulus. Episodes of recurrent genital herpes have also occurred in the first several days after starting prophylactic ACV (Douglas et al, NEJM 1894). The explanation for these observations is under investigation.