Supplementary Online Content


eAppendix. Complete Methods.

This supplementary material has been provided by the authors to give readers additional information about their work.
Appendix

Complete Methods

Thirty-eight HIV-positive Batswana children 7 years of age or older with at least 15 facial and/or hand flat warts were recruited by one dermatologist (RLM) from the Botswana-Baylor Children's Clinical Center of Excellence in Gaborone, Botswana after obtaining institutional review board approval. Patients were given 15% glycolic acid lotion (NeoStrata) to apply daily for the first two weeks to the affected area(s), and increased to twice daily application thereafter. Patients were evaluated every two weeks for eight weeks and monthly for the next eight weeks. At the initial visit and each follow-up visit, standard photos were taken. Wart characteristics were evaluated by number; elevation (not palpable; slightly palpable <0.5mm; definitely palpable >0.5mm); color change (significant hyperpigmentation; slight hyperpigmentation; skin color; slight hypopigmentation; significant hypopigmentation); and erythema, edema and scaling (none; mild; moderate; severe). At each follow-up visit, patients were asked subjectively if the warts improved (improved; no change; worsened) and if they had pain with the therapy (none; minimal irritancy; slight discomfort; moderate discomfort; severe discomfort). Other potential side effects of the medication including itching, burning, tingling or tightness were assessed. Compliance was addressed by questioning the patients about missed doses. For patients who withdrew from the study early, data was included and analyzed up to the point of withdrawal. Background medical information was collected on each patient, including the World Health Organization (WHO) clinical HIV stage, time of ART initiation and type of ART therapy (first line or second line regimens based on Botswana National Treatment Guidelines), wart onset (before; ‘during’ or within the same month; or after ART initiation), and the most recent CD4 and viral load counts prior to study enrollment. Biopsies were performed of a representative lesion from the face or hand in 30 consenting patients and analyzed for HPV together at The University of Texas Health Science Center. DNA was extracted using the Puregene Genomic DNA Purification Kit (Gentra Systems, Minneapolis, MN). HPV typing was carried out by nested PCR using EV-HPV5 and PGMY-GP+6 primer systems. Putative HPV-PCR amplified DNA fragments were isolated using gel electrophoresis, purified, cloned and sequenced according to a previously described method.6 Using Stata 11.0MP, Wilcoxon rank-sum tests were used to compare the number of warts at the beginning and EOS. The percentage change in the number of warts was calculated for patients with a countable number of warts (<500) at both time points. Characteristics (gender, age, WHO stage, CD4 count, onset of warts) potentially associated with improvement (decreased elevation or change toward skin color) in warts were tested with Fisher’s exact tests.