References

1. Sánchez P, Rodríguez MA, Martínez M, Ruiz I. Leiomiosarcoma cutáneo del pabellón auricular. Tratamiento quirúrgico. Piel. 2001:16:365.
2. Lázaro P, Suárez-Fernández R. Cirugía del pabellón auricular. In: Serrano Ortega S, editor. Perfiles Quirúrgicos en Dermatología. Barcelona, Madrid: Len/Mayo; 2005. p. 113-32.
3. Ciria G, Piqueras JM, Bengoechea MP, Pellicer D, Pellicer JL, Abascal A. Reconstrucción auricular de defectos secundarios a patologías adquiridas. In: Gil-Carcedo LM, Vallejo Valdezate LA, editors. El oído externo. Madrid: Ediciones Ergon, S.A.; 2001. p. 177-258.

Resolution of Recalcitrant Condylomata Acuminata in a Patient With Human Immunodeficiency Virus Treated With Topical Cidofovir

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To the Editor:

Infection by the human papillomavirus (HPV) is the most frequent sexually transmitted infection and will affect between 1% and 35% of the population in their lifetimes.[1] Current data suggest that this percentage is increasing, especially among white men infected with the human immunodeficiency virus (HIV).[2] The medical costs of managing these cases have been calculated at €30 million in the United Kingdom alone in 2003.[3] Currently available treatment for condylomata acuminata includes cryotherapy, podophyllotoxin, trichloroacetic acid, laser therapy, electrocautery, and, more recently, imiquimod—an immune-response modifier.[4]

We report the case of a patient infected by HIV who had condylomata acuminata resistant to conventional therapies; the condylomata acuminata was successfully treated with 3% topical cidofovir.

The patient was a 37-year-old man who had developed verruciform lesions around a year earlier on the inside of the foreskin and the coronal sulcus of the penis (Figure, A). The patient had been treated with podophyllotoxin, imiquimod, cryotherapy, electrocautery, and laser therapy, resulting in rapid reappearance of the lesions. The patient was infected by HIV and had a low CD4 lymphocyte count (120×10^6/L). He was prescribed a 3% cidofovir cream to be applied once daily. Treatment was suspended after 5 days due to an intense inflammatory response in the treated areas. The treated area displayed marked erythema and small erosions in some of the condylomata (Figure, B). At this point, the treatment regimen was replaced by treatment with zinc sulphate and topical antibiotics. All the lesions and the erythema had disappeared 4 weeks later (Figure, C). After 1 year of follow-up the patient continued to show no evidence of recurrence.

Cidofovir is a nucleotide analogue of deoxycytidine monophosphate with a broad spectrum of action against DNA viruses, including HPV. To date, cidofovir has only been approved for intravenous use in the treatment of retinitis due to cytomegalovirus in HIV patients resistant to ganciclovir and foscarnet. It has, however, been shown to be effective as a topical treatment for some viral lesions including warts and *Molluscum contagiosum*.[5] It has also been shown to be effective in some neoplastic lesions such as cervical intraepithelial neoplasia, erythroplasia of Queyrat, respiratory tract papillomatosis, Kaposi sarcoma, nasopharyngeal carcinomas associated with the Epstein-Barr virus, squamous cell carcinoma, basal cell carcinoma, and melanoma.[6,7] The mechanism of action of cidofovir in cutaneous lesions caused by HPV is thought to be due to its antiviral and antiproliferative effect on the infected cells, which divide readily.[8]

Figure 1. A, Verruciform condylomata acuminata on the inside of the foreskin and the coronal sulcus (Week 0). B, Inflammatory response to topical cidofovir with erythema and erosions (Week 1). C, Complete remission of the lesions at 4 weeks (Week 4).

Genital warts are the most frequently observed form of HPV infection and, to date, only 1 double-blind phase II clinical trial has been published on the use of topical cidofovir.[9] In that trial, 47% of the 19 patients in the group treated with cidofovir had a complete response with no important side effects reported. This percentage is similar to those obtained with other topical treatments, such as imiquimod and podophyllotoxin.[10]

This case supports the suggestion that topical cidofovir provides an effective alternative to patients with genital warts resistant to conventional therapies. However, clinical trials are required to determine the efficacy and safety of topical cidofovir in cutaneous lesions caused by HPV.

References

1. Koutsky L. Epidemiology of genital human papillomavirus infection. Am J Med. 1997;102:3-8.
2. Hagensee ME, Cameron JE, Leigh JE, Clark RA. Human papillomavirus infection and disease in HIV-infected individuals. Am J Med Sci. 2004;328: 57-63.
3. Brown RE, Breugelmans JG, Theodo ratou D, Benard S. Costs of detection and treatment of cervical cancer, cervi cal dysplasia and genital warts in the UK. Curr Med Res Opin. 2006;22: 663-70.
4. O'Mahony C. Genital warts: current and future management options. Am J Clin Dermatol. 2005;6:239-43.
5. Calista D. Topical cidofovir for severe cutaneous human papillomavirus and molluscum contagiosum infections in patients with HIV/AIDS. A pilot study. J Eur Acad Dermatol Venereol. 2000; 14:484-8.
6. Calista D. Regression of a cutaneous melanoma metastasis after intralesional cidofovir [letter]. Melanoma Res. 2003;13:205-6.
7. Calista D. Topical 1 % cidofovir for the treatment of basal cell carcinoma. Eur J Dermatol. 2002;12:562-4.
8. Andrei G, Snoeck R, Piette J, Del venne P, De Clercq E. Antiprolifera tive effects of acyclic nucleoside phosp honates on human papillomavirus (HPV)-harboring cell lines compared with HPV-negative cell lines. Oncol Res. 1998;10:523-31.
9. Snoeck R, Bossens M, Parent D, Delaere B, Degreef H, Van Ranst M, et al. Phase II double-blind, placebo controlled study of the safety and effi cacy of cidofovir topical gel for the treatment of patients with human papillomavirus infection. Clin Infect Dis. 2001;33:597-602.
10. Yan J, Chen SL, Wang HN, Wu T. Meta-analysis of 5 % imiquimod and 0.5 % podophyllotoxin in the treat ment of condylomata acuminate. Der matology. 2006;213:218-23.

Neonatal Zosteriform Herpes Simplex

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To the Editor:

It is almost impossible to distinguish clinically between the cutaneous lesions of zosteriform herpes simplex caused by the herpes simplex virus (HSV) and those occurring in herpes zoster due to infection with the varicella zoster virus (VZV),[1-4] and the distinction is particularly important in neonates, such as the case described in this letter, when correct and early diagnosis and prompt treatment are imperative.[1-3] Some of the published cases of neonatal herpes zoster may actually have been HSV infections, since in many cases diagnosis was clinical and the causal virus was not isolated.[3-6]

We present the case of an 11-day-old full-term newborn infant (gestational age of 40 weeks) admitted to our hospital with a 3-day history of low-grade fever accompanied by umbilicated vesicles and pustules on localized inflamed bases in a metameric configuration on the right-hand side (Figure 1). There were no other previous or concurrent signs or symptoms. The pregnancy and immediate postpartum period had been without incident, and there had been no known contact with cases of chickenpox or zoster. The birth had been by unassisted vaginal delivery. The mother reported having had chicken pox when she was 9 years of age and, when a more detailed clinical history was obtained, reported a history of recurrent vaginal burning and redness indicative of herpetic lesions in the genital area, although none were evident at the time.

The results of blood tests in the infant, including a basic immunologic workup (immunoglobulins and lymphocyte subpopulations), were normal. The results of blood culture

Figure 1. Skin lesions on admission.