

A case of flat wart that responds perfectly to isotretinoin

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Dear Editor,

Warts affect the quality of life negatively due to the fact that the warts, which are frequently seen in the society, cause psychosocial problems due to cosmetic appearance and sometimes can resist to multiple treatments (1). Diagnosis is generally based on clinical examination (2). In limited studies for the treatment of warts, tretinoin and vitamin A as well as other retinoids have been successfully used (2,3). A 16-year-old female patient presented with complaint of warts on face that had existed for 8 years. Dermatological examination showed common flat brown and united papules on cheeks, forehead and neck. (Figure 1.)



Figure 1a-b-c. Common papules on face and neck before treatment

The biopsy of the lesion was consistent with the flat wart. She had previously used many topical and immunomodulatory therapies such as cryotherapy, acid salicylic mixture, 5-fluorouracil, tretinoin and levamisole. However, partial success and recurrence were observed in the treatments. She had psychological problems due to her warts. Routine laboratory results were normal. The patient was given isotretinoin 30 mg/day for 3 months. At the end of 3-month treatment, near-total recovery was observed in the lesions (Figure 2).



Figure 2a-b-c. Near-total clearance after 3 months of treatment with isotretinoin

Here we present a case of flat wart that responded perfectly to isotretinoin which was disseminated to face. Viral warts are benign proliferation of skin and mucous membranes caused by human papilloma virus infections. These viruses usually cause prolonged subclinical and slow-growing lesions without causing acute symptoms. Approximately 65% of the cases can spontaneously regress within two years, and 35% resist the treatment (1).

There are more than 150 different HPV types classified as (alpha), β (beta), (gamma), μ (mu) and η (nu) -papillomavirus. Epidemiological studies have shown that warts affect between 5 to 20% of children and 3 to 5% of adults. Flat warts are mainly caused by HPV-3 and HPV-10. The flat warts are usually pigmented, skin color or grayish-yellow color papules of about 1 to 5 mm. A large number of lesions may be observed in the same patient. Some types of HPV are strongly associated with head and neck, oropharyngeal, cervical, anal and penile cancers. Furthermore, warts can have a psychologically destructive effect on the patient's lives and the emotional impact of any treatment should not be ignored. One has to take into account the possibility of spontaneous regression and therefore the therapeutic approach should not be very aggressive (1,2,3,4). Traditional treatments for human papillomavirus (HPV) infection are generally inadequate.

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The first-line treatments are topical agents such as tretinoin, 5-fluorouracil, imiquimod and cantharidine. The most preferred treatments by dermatologists are treatments for killing HPV infected cells such as salicylic acid and cryotherapy. High recurrence rates, scarring and post-inflammatory hyper- and hypopigmentation are common in these patients. Pulsed dye laser treatment is a relatively effective treatment with a 67.6% clearance rate in flat warts. In the study of Hamamy et al., the clearance rate was reported to be 73.07% in the flat warts cases treated with isotretinoin (3-5). HPV replication occurs simultaneously with epithelial cell differentiation. Isotretinoin was first used by Olsen et al. in 1989, in the treatment of recalcitrant genital warts. Retinoids affect cellular growth, differentiation and morphogenesis, inhibit malignant cell growth, have immunomodulatory activity, and alter cellular adhesion. An inverse association was observed between the concentrations of retinoid and HPV deoxyribonucleic acid in infected epithelial cells, indicating that retinoids had an effect on viral replication. The most common side effects are dryness and cheilitis. Early closure of epiphyseal is rare and occurs at high doses, although it is more common in children (2,4-6). Our case was almost completely recovered with 3 months of isotretinoin 30 mg/day and no recurrence was observed during 2 months of follow-up.

As a result, we found it appropriate to present this case of flat wart, which is disseminated and causes serious psychological problems and which was recalcitrant to many topical and systemic therapies, but responsive to isotretinoin.

Competing interests: The authors declare that they have no competing interest.

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