

Recalcitrant Warts Treated With Isotretinoin, an Old Drug in A New Role - Two Case Reports

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Abstract:

Warts are very common lesions encountered in dermatology practice. They are caused by human papillomavirus (HPV). We are presenting two cases of chronic recalcitrant warts treated successfully by Isotretinoin; one was having plantar warts and another had Condyloma acuminatum. The following case reports highlight its role as novel therapy in resistant widespread warts. Very limited literature is available on its role in the treatment of warts. The patients with warts especially genital warts suffer from great discomfort. As there is no fixed protocol or guideline to treat recalcitrant warts further studies are considered necessary.

Keywords: Human papillomavirus, condylomata acuminatum, recalcitrant warts, Isotretinoin.

Introduction

Warts are very frequent lesions encountered in dermatology practice. They are caused by human papillomavirus (HPV), which is a DNA virus. There are more than one hundred fifty HPV types, giving rise to a diversity of clinical phenotypes.^{1,2} Cutaneous infection occurs in the superficial layers of the skin, causing proliferation of the epidermal cells and thickening of superficial layers. Human papillomavirus types 2, 3, 4, 27, 29, and 57 are the most common types of HPV causing dermatological infections.^{1,2} Isotretinoin (a retinoid drug) achieves remarkable efficacy in treatment of warts probably by regulating cell-cycle progression, normalizing cellular differentiation, controlling cell survival and apoptosis.^{3,4} Oral Isotretinoin has no direct antiviral action but it works by increasing the turnover of keratinocytes which in turn causes accelerated exfoliation and reduction in the size of warts. We are presenting two cases of chronic recalcitrant warts treated successfully by Isotretinoin; one was having plantar warts and another had Condyloma acuminatum. The Condyloma acuminatum is a commonly transmitted viral infection. It is transmitted by sexual contact including genital, anal, or oral. Condyloma acuminatum is caused by the human papilloma virus (HPV) type 6 or less commonly by HPV type 11.^{1,5} The condylomata acuminatum is now the most widespread virally transmitted sexually transmitted disease, even superseding genital herpes.^{5,6} The following two case reports highlight its role as novel therapy in resistant widespread warts. Very limited literature is available on its role in treatment of warts.

Case history

A 45 year old male presented with chronic recalcitrant plantar warts for 6 years which were not responding to multiple therapies. On examination large macerated warty plaques covering entire left great toe, first interdigital space and the medial aspect of second toe. He was earlier treated elsewhere with cryotherapy, radiofrequency and topical keratolytic preparations without any response. He was initiated on oral Isotretinoin monotherapy after pre-retinoid and regular baseline work up, which was found to be normal. After 12 weeks of therapy he showed marked improvement and after 5 months of Isotretinoin therapy (patient weight – 52 kg, 20 mg per day) he had complete resolution of lesions.

Another patient was a newly married 24 year old male who presented with recalcitrant giant Condyloma acuminatum associated with pain and mild pruritus. The clinical examination revealed filiform and cauliflower like verrucous lesions involving glans penis, coronal sulcus, prepuce and urethral orifice. There was no history urethral bleeding or urinary obstruction. There were no perianal lesions. There was no history suggestive of immunosuppression and comorbidities. The search for evidence of other STDs was performed clinically and by specific laboratory investigations, which showed no evidence of other STDs in the patient. His baseline investigations were normal. He was initially treated with two sessions of cryotherapy but there was no response, so he was started on combination of weekly cryotherapy and daily oral Isotretinoin (patient weight – 42 kgs, 20 mg per day). After 14 weeks of this therapy he had complete resolution of lesions proving that Isotretinoin accelerated the therapeutic response of cryotherapy.

Discussion

The patients with warts especially genital warts suffer from psychological, social, emotional and sexual discomfort. As there is no fixed protocol or guidelines to treat recalcitrant warts further studies are considered necessary. Our cases highlight the role of Isotretinoin in the treatment of recalcitrant giant warts. More studies are needed with large number of participants to demonstrate the definite role of oral Isotretinoin in warts and to gather more information on the duration of the therapy. We got hundred percent success in treating warts with Isotretinoin and also got accelerated response when combined with cryotherapy. So we recommend the use Isotretinoin with or without cryotherapy in recalcitrant warts. Owing to the threat for transmissibility, as well as the danger for the development of squamous cell carcinoma, warts should be treated meticulously.

Figure 1 Recalcitrant large plantar warts (before treatment)



Figure 2 After treatment complete resolution of plantar warts



Figure 3 Recalcitrant Condyloma acuminatum (genital warts) before treatment



Figure 4 Condyloma acuminatum (genital warts) after treatment



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