SHORT REPORT

Treatment of recalcitrant facial verrucae vulgares with sinecatechins (greentea catechins) ointment

A. Clouth, H. Schöfer*

Department of Dermatology, Venereology, and Allergology, J.W. Goethe University, Frankfurt/M., Germany
*Correspondence: H. Schöfer. E-mail: Schoefer@em.uni-frankfurt.de

Abstract

Background Facial verrucae vulgares are benign, but disfiguring skin manifestations of human papilloma virus infection. They are found as verrucae planae juveniles in young adults, but also as common warts in immunocompromised or atopic patients.

Objective To find an alternative, non-surgical treatment for a young man with atopic dermatitis and facial warts, who had not responded to 5-FU ointment, waterfiltered infrared A (wIRA) irradiation and topical retinoids.

Methods Topical treatment with a sinecatechins 10% ointment (Veregen™) as approved for genital warts thrice daily for 3 weeks in a 34-year-old man with atopic dermatitis

Results Complete remission of all facial warts was achieved within 20 days. Few side-effects were observed (initially some light skin irritation only).

Conclusion In this case, topical sinecatechins proved to be a well-tolerated and effective alternative to treat recalcitrant facial warts without surgery.

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Conflicts of interest

H. Schöfer has received speakers' fees from Abbott, Meda, Medigene and Galderma and is a member of Galderma and Medigene advisory boards. A. Clouth does not state a conflict of interest

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Introduction

Verrucae vulgares are a common, benign skin manifestation of HPV infection (HPV 1,2,4,7). Due to these distorting and disfiguring skin lesions the persons affected suffer. Though there is a chance of spontaneous remission, most patients ask for a specific treatment. Therefore, local keratolytic ointments such as salicylic acids followed by curettage, cryotherapy or the application of 5-fluoruracil are used. A new approach for the treatment of warts is the use of topical imiquimod or sinecatechins. Sinecatechines derive from green tea, and they have been shown to have an anti-inflammatory, immunostimulating as well as antimicrobial potential and have been approved for the treatment of genital and perianal warts.[1–4]

Case report

We report on a 35-year-old male suffering from atopic dermatitis presenting with facial warts accented around the mouth since 5 month (Fig 1). Local therapy with 5-fluoruracil (Efudix™, MEDA Pharma, Bad Homburg, Germany) as well as waterfiltered infrared A (wIRA)[5] for a period of almost 2 months showed no effect.

A subsequent therapy with a vitamin A containing dissolution for further 3 weeks did not result in an improvement. In consideration of this insufficient condition, the patient was suffering and asking for a therapeutic alternative. However, due to being afraid of scars, all surgical or laser methods were rejected. Therefore, we recommended the topical off-label-use of sinecatechins (Veregen™, Medigene AG, Planegg-Martinsried, Germany) three times a day. On the occasion of the next consultation 20 days after starting this treatment the warts had disappeared completely (Fig. 2). Concerning side-effects the patient only reported slight skin irritation during the first days of application. Almost 3 months later the patient still showed complete remission, no new warts had developed.

Discussion

There are many possibilities in treating facial warts. However, not all options show satisfactory efficacy or even might result in scars, such as C02-laser surgery and curettage. In addition, there could be further inoculation of the virus, leading to perifocal relapses.

Apart from the common therapies, there are new ways in treating warts by using immunostimulatory therapies. Besides

Figure 1 Perioral warts in a patient with atopic dermatitis (D.D. 34 y.)

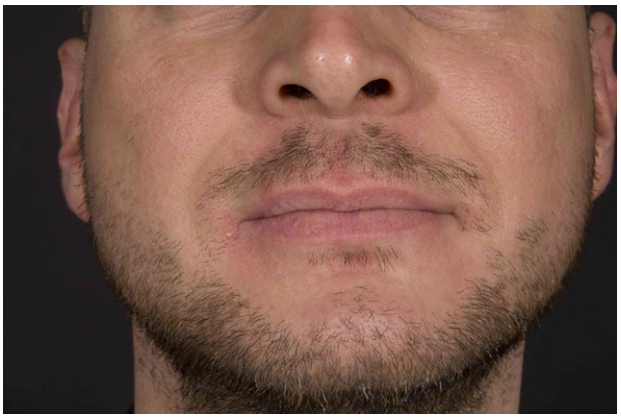

Figure 2 Patient D.D. after 20 days of topical treatment with sinecatechins 10% ointment 3x/day: Complete remission.

the good results presented in our case, there are case reports showing good results for topic imiquimod 5% cream. Mühlstädt *et al.*[6] showed satisfactory results in using imiquimod 5% cream in a 6-year-old girl suffering from verrucae planae juveniles in her face since 2 years. After applying imiquimod twice a week for 4 weeks, all warts disappeared without scarring.[7]

Concerning topical sinecatechins, Tatti *et al.* showed significant results in patients suffering from HPV associated anogenital warts. Patients treated with sinecatechins ointment 15% as well as 10% showed a better outcome in comparison to the population treated with placebo. However, the results between the sinecatechins ointment 15% and 10% did not vary significantly.[7–9] Sinecatechins 10% ointment is approved to treat genital warts in Europe (Veregen Ointment™, Medigene AG).

Sinecatechins derive from green tea. So far, green tea is commonly known for its antioxidant effects. This quality mainly is due to a group of polyphenols, the so called catechins. Among the four main representatives (epigallocatechingallate, epigallocatechin, epicatechingallate and epicatechin) epigallocatechingallate EGCG accounts for about 59% and also constitutes the main catechin in sinecatechins ointments.[10]

Sinecatechins possess – among others – antiviral, anti-infective and immunomodulatory qualities.[11]

Tyring, for instance, could show that inflammatory mediators also playing a role in developing HPV associated warts, such as proteinases, protein kinases and oxygenases, could be inhibited by sinecatechins.[12] Apart from that, further studies showed not only an inhibitory effect of inflammatory mediators but also an induction of endogenous antioxidant mechanisms realized by superoxid dismutase and gluthathione for instance.[13]

Considering all data obtained topical treatment for facial warts with immunostimulatory ointments like imiquimod or local sinecatechins might be considered as a notable alternative for surgical methods concerning side-effects and outcome.

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