Received: 8 February 2020 | Revised: 17 May 2020 | Accepted: 20 May 2020

DOI: 10.1111/dth.13664

DERMATOLOGIC THERAPY WILEY

LETTER

A recalcitrant case of facial verruca plana successfully treated with topical calcipotriol alone

Dear Editor,

Verruca plana is a benign epidermal proliferative cutaneous condition mainly caused by human papillomavirus (HPV) types 3 and 10. HPV 27, 28, 38, 41, and 49 may also rarely cause verruca plana.[1] Face located plane warts usually cause important aesthetic concerns in patients and lead them to seek treatment. The management of verruca plana poses a therapeutic challenge for clinicians, as there is no single method that has been proven to be efficient for completely treating the disease.

An 18-year-old woman presented with an 8 months history of asymptomatic numerous small brown lesions on the chin. She was otherwise healthy and her past medical history was unremarkable. The lesions did not respond to previously treatments including oral zinc, topical tretinoin, and topical adapalene. Dermatological examination revealed numerous, plane, yellowish to brown irregular papular lesions ranging in size from 0.1 to 0.4 cm distributed on the left side of the chin (Figure 1A). Dermatoscopic examination showed numerous tiny dotted (pinpoint) vessels on a light brown background (Figure 2). No other lesions were observed elsewhere. Based on the clinical and dermatoscopic examinations, a diagnosis of verruca plana was made. Daily simple application of topical calcipotriol ointment allowed a complete resolution after 8 weeks without adverse reactions (Figure 1B). No recurrence was observed during 6 months of follow-up.

Common therapeutic options for verruca plana include cryotherapy, electrocoagulation, topical salicylic acid, topical retinoids, topical imiquimod, topical immunotherapy, laser or conventional/daylight photodynamic therapy.[2,3] Most of these options may cause dyspigmentation, pain, and even scarring. Furthermore, no treatment has been uniformly effective and, treatment resistance is common.

There are very few studies on the effectiveness of topical vitamin D derivatives in the treatment of viral warts. Imagawa et al reported a series of 17 cases of hand or foot located warts successfully treated with topical maxacalcitol.[4] Egawa et al managed three immunocompromised cases with recalcitrant warts, using topical maxacalcitol with a half-day occlusive dressing technique.[5] Labandeira et al reported a case of giant wart successfully treated with topical calcipotriol.[6] Rind et al reported the successful use of topical calcipotriol in a case of anogenital wart in an infant.[7]

Recently, it has been shown that intralesional vitamin D3 injection may be a simple, safe and cost-effective treatment modality with minimal side effects. In a single-blinded placebo-controlled study investigating effectivity of intralesional vitamin D3 injection in the treatment of common warts, complete clearance of the target injected warts occurred in 40% of patients in cases group, while it occurred only in 5% of patients in control groups.[8]

Topical vitamin D3 derivatives are considered as first-line therapy in the treatment of chronic plaque psoriasis.[9] Biologic effects of

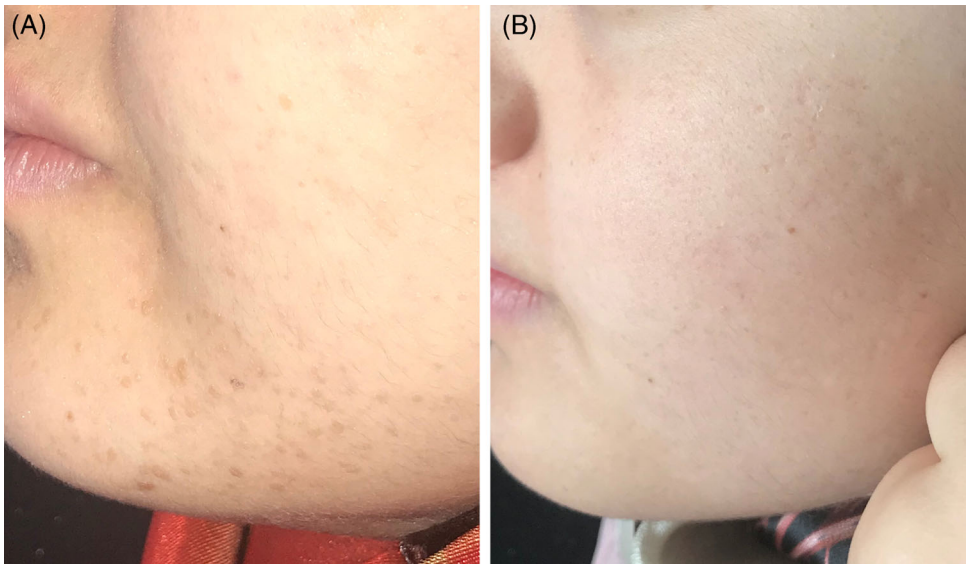

FIGURE 1 A, Verruca plana. Numerous, plane, yellowish to brown, irregular papular lesions ranging in size from 0.1 to 0.4 cm distributed on the left side of the chin. B, Complete resolution of the lesions after daily application of topical calcipotriol for 8 weeks

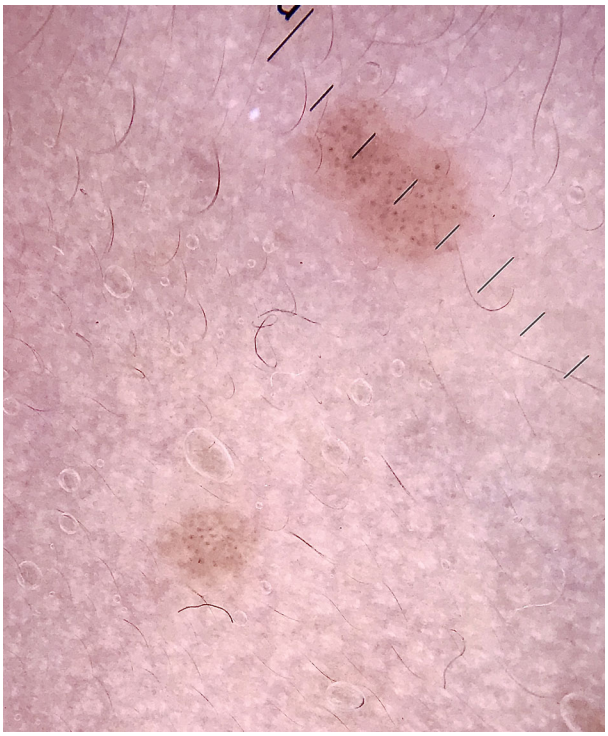

FIGURE 2 Dermoscopic examination showed numerous pinpoint vessels widely scattered over the light brown background

vitamin D3 derivatives mainly include regulation of epidermal proliferation and modulation of cytokine production. Recent studies showed that vitamin D3 derivatives may also have an effect on cell death and angiogenesis. These biological actions may explain the efficacy of vitamin D3 derivatives for treating warts.[5]

In conclusion, this report demonstrates that a simple application of topical calcipotriol may be an effective and safe treatment option for plane warts. However, the resolution of warts in one patient may not be proof of the efficacy of topical calcipotriol because plane warts may also resolve spontaneously in a certain subset of patients. Considering that the classical treatment options usually have limited efficiency and side effects such as pain, pigmentary changes and scarring, we would encourage placebo-controlled studies investigating the effectiveness and safety of topical vitamin D3 derivatives for treating plane warts.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

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