Case Report Open Access

Trichostasis Spinulosa – Successful Treatment by Repeated Peeling with Capryloyl Salicylic Acid

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Abstract

Trichostasis spinulosa is an uncommon midfacial disease with negative impact on self esteem and appearance. Many available treatments provide only short time improvement. We report a 36-year-old female treated with a series of four capryloyl salicylic acid peelings with significant improvement for at least 24 months.

Keywords: Trichostasis spinulosa; Treatment; Capryloyl salicylic acid peeling

Case Report

A 36-year old woman, Fitzpatrick skin type III, with multiple papules with black heads on the cheeks was referred to our department. After the diagnosis TS had been confirmed by histology. She was seeking medical therapy for this disfiguring disease (Figure 1a).

We used a medical peeling with Capryloyl Salicylic Acid (CSA) peel 10% every second week for a total of four treatments. The procedure was well tolerated. One to two days after the peeling, a temporary erythema with increased scaling was noted. During the treatment course improvement was obvious. The condition further improved during the follow up of 24 months (Figure 1b).

Discussion

Trichostasis Spinulosa (TS) is a mid-facial disease that occurs in younger age in female patients with Fitzpatrick skin type III or higher or in light skinned older people with excessive UV-exposure. Especially in younger patients acne is a differential diagnosis, since the lesions resemble black heads [1-4].

The disease is caused by an abnormal angulation of the hair follicle that leads to entrapment of vellus hairs [3]. The disease may cause some itch but the major problem is appearance [4]. Patients seek medical care for this condition because of cosmetic reasons. Topical retinoids, depilatory wax, tweezing, and lasers have been used with variable success [5-7].

TS often develop as a sporadic disease but sometimes trigger factors can be identified (Table 1). TS therapy with long-term effects is a challenge. 800 nm-pulsed diode laser treatment – two courses a month apart - resulted in complete clearing of the lesions for a period of 8 to 12 weeks. A decrease in dark-plug appearance of greater than 50% was noted in half of the subjects 20 weeks after the second treatment [6].

A 755 nm laser therapy with two courses a month apart decreased

Factor(s)	Reference(s)
Hair follicle anatomy	[1], [2], [4]
Minoxidil	[11]
Topical corticosteroids	[12]
Chronic renal failure	[13]

Table 1: Possible factors leading to trichostasis spinulosa.

dark-plug density of greater than 50% in 16 of 31 patients (51.3%), while only three patients (9.7%) had an improvement of greater than 75%. Ten of the 21 patients (47.6%) with skin type III and six of the seven patients (85.7%) with skin type IV achieved at least 50% improvement in lesions at 20 weeks (P=0.1) [7].





Figure 1: Trichostasis spinulosa on cheeks. (a) Before treatment. (b) Two years later after CSA-peels.

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Received August 23, 2011; Accepted May 25, 2012; Published May 25, 2012

Citation: Wollina U (2012) Trichostasis Spinulosa – Successful Treatment by Repeated Peeling with Capryloyl Salicylic Acid. J Clin Exp Dermatol Res 3:144. doi:10.4172/2155-9554.1000144

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Here we used CSA peeling with a follow up of 24 months. CSA is an ester-derivate with increased lipophilicity. The compound has corneolytic, anti-inflammatory, anti-microbial and anti-comedonic activities. That makes it an interesting agent for superficial peels. Derivatives of salicylic acid, especially long-chain fatty acyl conjugates of salicylic acid, have been claimed to be more effective at lower concentrations for skin peeling use [8]. CSA has been shown to be an effective exfoliating agent due to its reduced penetration in the skin. Because of its pH of 5.5 it does not need neutralization [9,10].

In the present TS patient an excellent long term improvement was achieved by CSA peel. The treatment was well tolerated and seems to be an alternative to more invasive laser treatments.

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