

Novel use of trichloroacetic acid in deep heel fissures

Problem

Heel fissures are a common dermatologic condition characterised by disruption in the epidermis which extends to the dermis. These occur because of dry and hyperkeratotic skin, barefoot walking, use of backless shoes, plantar keratodermas or systemic diseases.¹ Deep fissure can result in pain, bleeding and affect mobility. The usual therapeutic modalities for plantar fissures include emollients and keratolytics. They require frequent applications for a prolonged period and are ineffective occasionally in deep, recalcitrant fissures.

Solution

We describe a novel treatment of recalcitrant deep heel fissures with trichloroacetic acid. A higher concentration of

trichloroacetic acid (>50%) causes coagulation necrosis up to the reticular dermis resulting in a localised wound that heals with secondary intention.² We utilised this attribute of trichloroacetic acid for the treatment of deep heel fissures [Figure 1]. The sharp end of a wooden toothpick was used to apply trichloroacetic acid (100%) to the opposing margins of the fissures till a faint white frost was achieved. Single application of the chemical resulted in significant improvement at three weeks [Figure 2]. No appreciable side effects were observed immediately and during the follow-up period. Repeat application can be done at three weeks if required. The patient can subsequently be maintained on bland emollients after the fissures resolve to prevent a recurrence. Trichloroacetic acid is an easily available, cost-effective and



Figure 1: Deep fissures on the heel at baseline



Figure 2: Satisfactory improvement seen at 3 weeks of follow-up after TCA application

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efficacious modality for the treatment of recalcitrant deep heel fissures.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflict of interest

There are no conflicts of interest.

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