

Use of 27-gauge Tuberculin Syringe for Trichloroacetic Acid Chemical Reconstruction of Skin Scars (TCA-CROSS)

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Abstract

Chemical Reconstruction of Skin Scars (CROSS) is a minimally invasive, safe, and cost effective technique for the management of ice pick acne scars that are otherwise generally resistant to treatment. 100% trichloro acetic acid (TCA) is usually applied using toothpicks and the end point is white discoloration of skin. The concentrated caustic agent quite often spills onto surrounding normal skin leading to superficial burns and post-inflammatory pigmentation. Use of 27-gauge tuberculin syringe gives a much more controlled access to apply TCA leading to better cosmetic outcome and fewer adverse effects.

Keywords: Acne scar, chemical reconstruction of skin scars, trichloroacetic acid, tuberculin syringe

SURGICAL CHALLENGE

Use of trichloroacetic acid chemical reconstruction of skin scars (TCA-CROSS) is a minimally invasive, safe, and cost-effective technique for the management of ice pick acne scars that are otherwise generally resistant to treatment. Ice pick scars are a type of deep atrophic acne scars, which extend up to subcutis.^[1] They generally have a wide opening of about 1–2mm and a deeper narrow infundibulum, forming a conical “v” shape.

Chemical reconstruction of skin scars using 100% TCA causes coagulative necrosis of cells in the epidermis and dermal collagen along with precipitation of keratin proteins.^[2] TCA-CROSS is effective in managing these deep acne scars and results in quick healing and better cosmetic outcome.

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SOLUTION

Use of 27-gauge tuberculin syringe gives a much more controlled access to apply TCA. The narrow needle is able to access the bottom of the ice pick scars, where the chemical is actually needed [Figure 1]. The fluid drop

outside the syringe forms a globule due to surface tension dynamics [Figure 2]. The amount of TCA to be applied can easily be controlled with the plunger. The spill of the acid is minimum leading to less downtime postprocedure and finally very minimal collateral skin damage.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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Figure 1: Tuberculin syringe application of trichloroacetic acid



Figure 2: 27-gauge tuberculin syringe with trichloroacetic acid globule

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