Assessment of the Combined Efficacy of Needling and the Use of Silicone Gel in the Treatment of C-Section and Other Surgical Hypertrophic Scars and Keloids.

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Abstract

OBJECTIVE:

To evaluate the individual effectiveness of needling therapy using the Dermapen (Dermapen, Salt Lake City, Utah) and topical therapy with silicone gel (Kelo-cote, Sinclair Pharma, London, England), and their combined effectiveness for the treatment of linear surgical scars, hypertrophic scars, and keloids.

MATERIALS AND METHODS:

Twenty patients were randomly selected and equally divided into 2 groups (A and B), with each group of 10 including 6 patients with keloids and 4 with hypertrophic scars. Treatment assignments were random. In group A, the entire scar was treated by skin needling, with silicone gel applied to half of the scar. Patients in group B were treated with silicone gel on the whole scar, with only half of the scar also treated with skin needling. During follow-up visits, clinical photographs, evaluation of the scars' thickness, skin ultrasound, and modified Vancouver Scar Scale were performed.

RESULTS:

Group A showed an average improvement of 68% ($P < .01$) on the half of the scar with the combination treatment (skin needling plus silicone gel) compared with a 52% improvement on the half of the scar that was treated with only skin needling. Group B showed an average improvement of 63% ($P < .01$) where the combination treatment was performed, compared with 47% improvement on the area treated with only the silicone gel.

CONCLUSIONS:

In conclusion, the combination of these 2 treatments is safe and effective for the treatment of hypertrophic scars and keloids. These modalities achieved favorable results with each patient adhering to the study paramenters.