Cosmetic & Pharmaceutical Research > Cosmetic & Pharmaceutical Research > Laser Treatment

9 | Nonablative fractional photothermolysis for acne scars: clinical and in vivo microscopic documentation of treatment efficacy.

Bencini PL, Tourlaki A, Galimberti M, Longo C, Pellacani G, De Giorgi V, Guerriero G.; Dermatol Ther. 2012 Sep;25(5):463-7. doi: 10.1111/j.1529-8019.2012.01478.x.

ABSTRACT

Fractional photothermolysis has been shown to improve various types of scarring, including atrophic acne scars. The aim of the present authors was to assess the efficacy and safety of the nonablative fractional photothermolysis in the treatment of moderate and severe acne scars. Eighty-seven patients with moderate or severe acne scarring were treated with six sessions with a 1540-nm Erbium glass fiber laser at 3-week intervals. Six months after the final session, 7/87 (8%) patients showed a moderate improvement, whereas 80/87 (92%) patients had a marked improvement. In a subset of patients, the present authors also applied in vivo reflectance confocal microscopy to highlight the relevant microscopic changes. Hence, early and late posttreatment findings, most importantly the replacement of a coarser collagen with a new one, similar to the collagen seen in healthy skin, were observed. In accordance to previous studies, the present authors conclude that nonablative fractional photothermolysis is a safe and effective treatment for moderate or severe acne scarring.