Treatment of striae distensae with non-ablative fractional laser: clinical and in vivo microscopic documentation of treatment efficacy.


ABSTRACT
The efficacy of NAFL in the treatment of striae distensae (SD) has been demonstrated. Nevertheless, the base for this improvement has not been clarified yet. The aim of this study is to describe in vivo variations occurring in the skin after the treatment, using reflectance confocal microscopy (RCM). Ten patients asking for the treatment of SD were enrolled. Clinical and RCM images were acquired before the treatment, immediately after 1 and 6 months after the first treatment. One thousand five hundred forty-nanometer laser treatments were performed every 4 weeks for 6 sessions. Efficacy was estimated through the evaluation of pre- and post-treatment clinical pictures by two expert and independent physicians and with GAIS. Improvement of SD was observed in 80% of patients. Temporary erythema and edema were reported. RCM revealed the dissolution of collagen bundles and the appearance of new papillae, as compared to baseline. NAFL represents an effective and safe treatment modality for SD. We report herein in vivo variations occurring in SD after NAFL treatment. KEYWORDS: In vivo imaging; NAFL; Reflectance confocal microscopy; Striae distensae PMID: 28980136 DOI: 10.1007/s10103-017-2341-4