

A PILOT STUDY TO TREAT MILD TO MODERATE LAXITY OF LOWER FACE AND NECK WITH A BIPOLAR FRACTIONATED MICRONEEDLE RADIOFREQUENCY DEVICE

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Background: Laxity of lower face and neck skin is a common concern of cosmetic patients during the aging process. Correction of laxity in this anatomic area can be challenging to achieve without the traditionally invasive surgical lifting procedures. This pilot study evaluated the use of a bipolar fractionated microneedle RF device for the improvement mild to moderate skin laxity of the of lower face/neck area.

Study: Thirty patients (7 males, 23 females, age range 37–71 years old) were recruited with mild to moderate skin laxity of the lower face/neck. A single physician performed all procedures, using a regimen of three sequential treatments at monthly intervals. Each treatment utilized three passes with a RF device (Infini, Lutronic Corp, Goyang Korea), equipped with a handpiece and a 1-cm² disposable microneedle tip, which had 49 proximally insulated 34-G microneedle electrodes with a maximum depth of treatment ranging from 1 mm to 3 mm. Evaluation was performed at 6 months post the last treatment, using a primary endpoint of standardized, computerized measurements of the gnathion and cervicomenal angles in the treated area. A secondary endpoint was identification of standardized pre-post photography by panel of blinded investigators.

Results: Average decrease in the cervicomenal angle pre-treatment and post treatment was 27.2 ° ($P < 0.01$) Average decrease in the gnathion angle pre-treatment and post treatment was 16 ° ($P < 0.01$). Additionally, patients attained clinically significant change in skin laxity, as assessed by a blinded, independent two-physician panel photographic review (100% correct identification of baseline and post final treatment images).

Conclusion: This study demonstrates the efficacy and safety of a bipolar fractionated microneedle RF device for improvement in lower face/neck laxity.