

Evaluation of a 1540 nm and 1410 nm Non-Ablative Fractionated Laser for the Treatment of Striae.

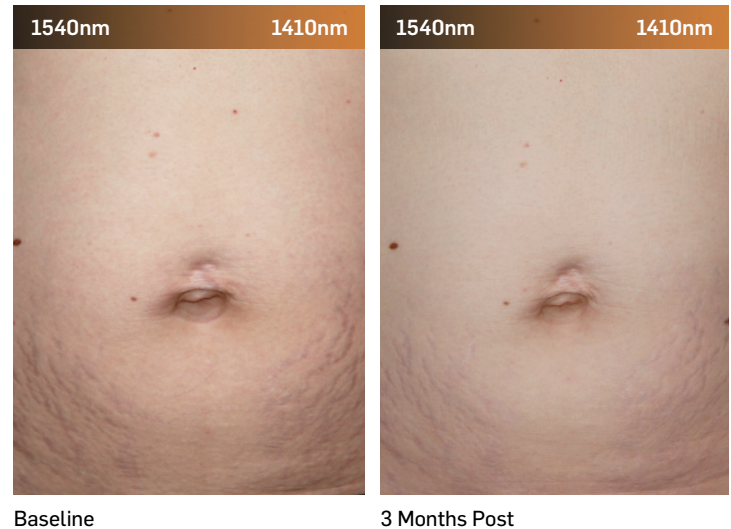
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Study Design:

- 10 patients with abdominal striae were treated.
- ½ of the abdomen was treated with the Icon 1540nm laser (XD: 50 J/cm², 15 ms, 2 passes; XF: 50 J/cm², 15 ms, 2 passes, total 25% density). The other ½ was treated with the Emerge 1410nm laser (30 J/cm², 5 passes, 16% density).
- Patients received 6 total treatments at 2-6 weeks apart. Photographs were taken at baseline and 3 months follow up.
- Results were scored by dermatologists (blinded to Tx detail) and by patient self-assessment.

Results:

- 9 patients completed the study and all demonstrated clinical improvement.
- 28% of 1410nm and 33% of 1540nm treated patients were rated at "good" or "excellent". 72% of 1410nm and 66% of 1540nm patients were rated as having "mild" or "fair" improvement.
- Difference in efficacy between the 2 lasers was not statistically significant ($p=0.747$).
- All patients were either "very satisfied" (71.4%) or "moderately satisfied" (28.6%) with the treatment.
- All patients experienced transient hyperpigmentation, which lasted longer on 1410nm side.
- Pathology showed 1540nm had more dermal thickening and collagen production, but equal amount of elastin production to the 1410nm.



Conclusion:

- Treatments with the Icon 1540nm were significantly quicker, resulted in less pigmentary change and showed greater improvement in collagen production than with the Emerge 1410nm.
- Both were well tolerated without long-lasting side effects.
- All patients demonstrated clinical improvement of their striae following both laser treatments.