A Novel Application of Radiofrequency Using a Continuous Thermal Treatment Device for Skin Tightening of the Face and Neck Assessed with 3D Photography

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Presented at The European Academy of Dermatology and Venereology Meeting, October, 2011
Provided for educational purposes
Introduction

- Non-ablative radiofrequency devices
  - Decrease skin laxity, tighten skin
  - Improve the appearance of rhytids
  - No recovery time, painless

- Thermal effect:
  - 4Mhz RF -to- current flow -to-
  - deep tissue heating
  - Dermal collagen fibril shortening
  - Dermal collagen synthesis
Subjects and study design

- 49 subjects
- 4 Men and 45 women, ages 30-71 (median 59)
- Fitzpatrick skin types I-V (91% II-III)
- Moderate to severe neck wrinkles
  - 4-9 on FWAS
- No other cosmetic procedures to treated area for 12 months prior and throughout study

- 2 treatments, 1 month apart
  - 1 practitioner
  - 5 passes (heat cycles)
  - Surface temperature target range: 41-43°C
- Treatment area from crows feet to clavicles
- 3D photographs at baseline and 120 days after 2nd treatment
3D Photography
3D Photography

[Images of 3D photographs]
Before and After photos (120 days)
Before and After photos (120 days)
Results

Global Aesthetic Improvement Scale (GAIS)*

-1  Worse
0   No change
1   Improved
2   Much improved
3   Very much improved

*Adapted from Narins R et al, Dermatol Surg 2003; 29: 588-95

76% of patients demonstrated improvement based on GAIS comparisons of 3D images at 120 days.

Patient Satisfaction Surveys

-1  Worse
0   No change
1   Subtle improvement
2   Mildly improved
3   Moderately improved
4   Very good improvement

85%  Overall patient satisfaction

- 80.77% laxity
- 84.61% smoothness
- 61.54% brightness
Disclosures & References


References:


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