

# CLINICAL PAPERS



## A RETROSPECTIVE STUDY OF PATIENT SATISFACTION FOLLOWING A TRIAL OF NANOFRACTIONAL RF TREATMENT

Martin Ray MD and Michael Gold MD | *Journal of Drugs in Dermatology*, Volume 14, Issue 11, Pages 611-614

### MATERIALS AND METHODS:

- n = 43
  - Varying degrees of rhytides, hyperpigmentation, skin laxity, and texture irregularity
  - Received 1-3 Venus Viva™ treatments
- Patient satisfaction assessed 3 months after last treatment
  - 5-point Likert-type scale (1 – “Very Poor” to 5 – “Excellent”)
  - Assessed 5 separate domains: degree of comfort during treatment, recovery time, treatment results, convenience and efficiency of treatment, and whether they would recommend to a friend.

### RESULTS:

- Results show positive patient satisfaction. **60% reported “Excellent” satisfaction across all 5 domains.**
- None reported severe side effects from the treatment, i.e. burns, skin irritation or scarring.

### STUDY CONCLUSIONS:

- The study provided support for the treatment of various age-related skin conditions with fractional RF.
- Patients reported satisfaction with both the comfort level of the treatment as well as the recovery time following treatment procedures.

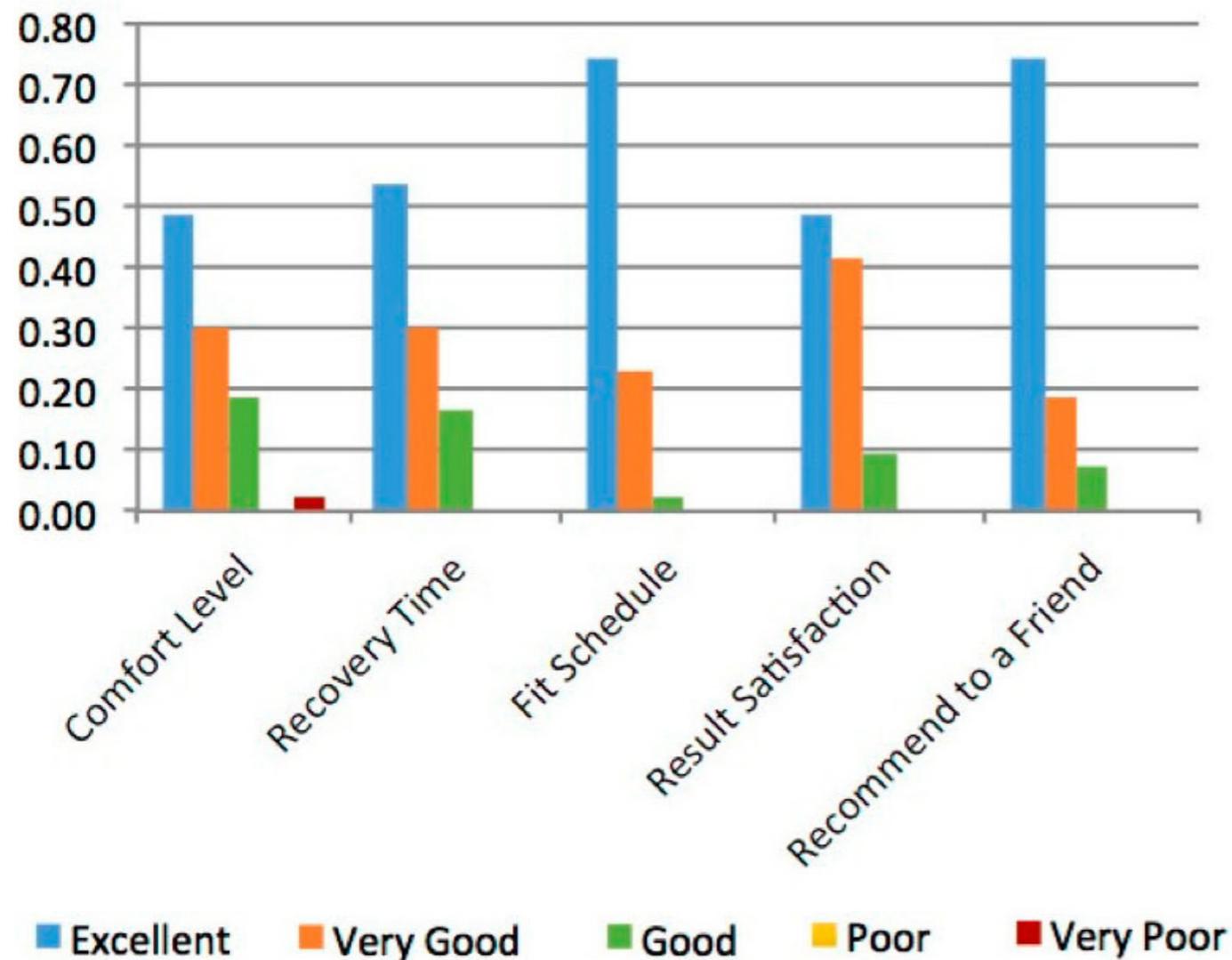
### GENERAL CONCLUSIONS ON VENUS VIVA™:

- Venus Viva™ is believed to offer increased efficacy, due to operator ability to control both power and pulse duration, which results in improved control of tissue ablation or coagulation ratio.
- The reduced footprint is believed to be associated with decreases in reported treatment side effects.
- SmartScan™ and NanoFractional RF™ technology provide homogeneous RF treatment with increased density control, which leads to greater frequency of painless RF exposure



SELF-REPORTED PATIENT SATISFACTION  
SCALE OF 1 = VERY POOR TO 5 = EXCELLENT

FIGURE 3.



- 60% of participants reported “Excellent” across all 5 domains.
- Only 1 participant reported “Very Poor” for comfort level during treatment. No other “Poor” or “Very Poor” rating across all the domains.

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## AN EFFICACY AND SAFETY OF NANOFRACTIONAL RF FOR THE TREATMENT OF STRIAE ALBA

N Pongsrihadulchai et al, Srinakharinwirot University, Bangkok | *Journal of Cosmetic Dermatology*  
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### MATERIALS AND METHODS:

- n = 33
  - Patients\* with striae alba on their thighs, abdomen, or buttocks
  - Treated with 3 Venus Viva™ treatments at 4-week intervals
- Clinical outcomes were assessed by:
  - Comparing pre- and post-treatment measurement of total lesional surface area, and length and width of lesions.
  - Histopathological evaluation (skin epidermal thickness, collagen and elastin counts) was also performed on 6 subjects.
  - Subjects' satisfaction for the change in lesional texture, size and overall improvement was evaluated using a 5-point rating scale (1 = "Very Dissatisfied" to 5 = "Very Satisfied").
  - Two independent dermatologists completed a before-and-after satisfaction rating.

### RESULTS:

- 4 weeks after last treatment, total surface area, length and width of striae alba significantly decreased from the baseline ( $p < 0.001$ ).
- Histopathology: Average mean number of collagen and elastin bundles was significantly increased ( $p = 0.005$  and  $0.012$  respectively).
- Patient satisfaction scores of "Satisfied" and "Very Satisfied" for changes on texture, size, and overall improvement were 96.67%, 93.94% and 96.97% respectively.
- The physicians' satisfaction showed concordant results that about 69.7% of all subjects had >50% improvement.
- The mean pain score was 2.33 (0 is not pain and 10 is intolerable pain).
- Post-inflammatory hyperpigmentation (PIH) was observed in 6 patients (18.1%) which improved with topical 4% hydroquinone.

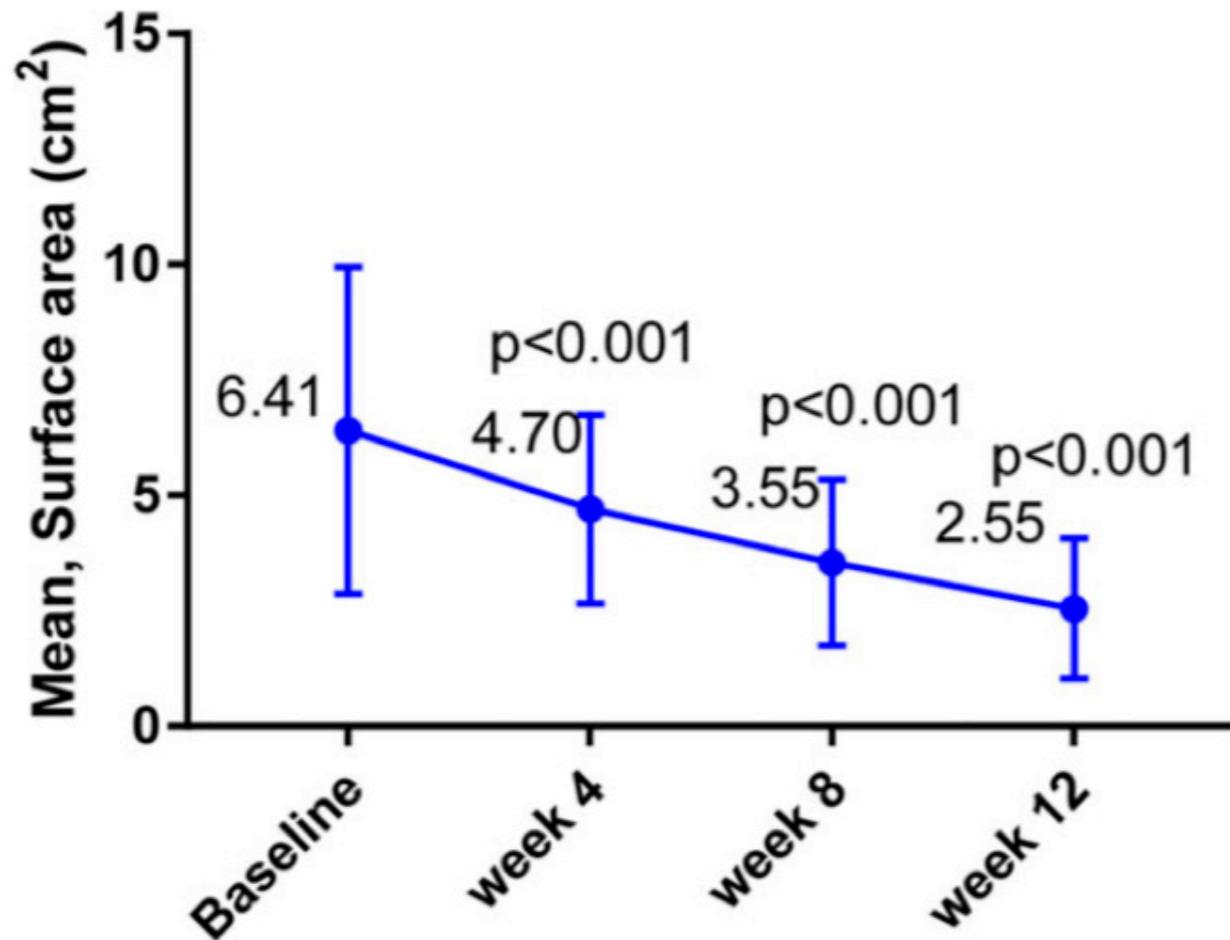
### CONCLUSIONS:

- The incidence of PIH in this study was lower than the incidence of PIH reported in studies with fractional CO<sub>2</sub> lasers (81.2%) and fractional Erbium glass lasers (36.4%).
- Dermal collagen and elastin production was significantly induced.
- The NanoFractional RF™ is highly effective and safe for the treatment of striae alba. Therefore, it could be recommended as a new treatment of striae alba.

\*Patients of Fitzpatrick Skin Types III-IV residing in Thailand.



TOTAL SURFACE AREA COMPARISON  
AT DIFFERENT VISITS WITH THE BASELINE



Statistically significant ( $p < 0.001$ ) reduction of total surface area and striae width and length from baseline to each follow-up visit

- High patient scores of 4 (Satisfied) and 5 (Very Satisfied) with improvement in:

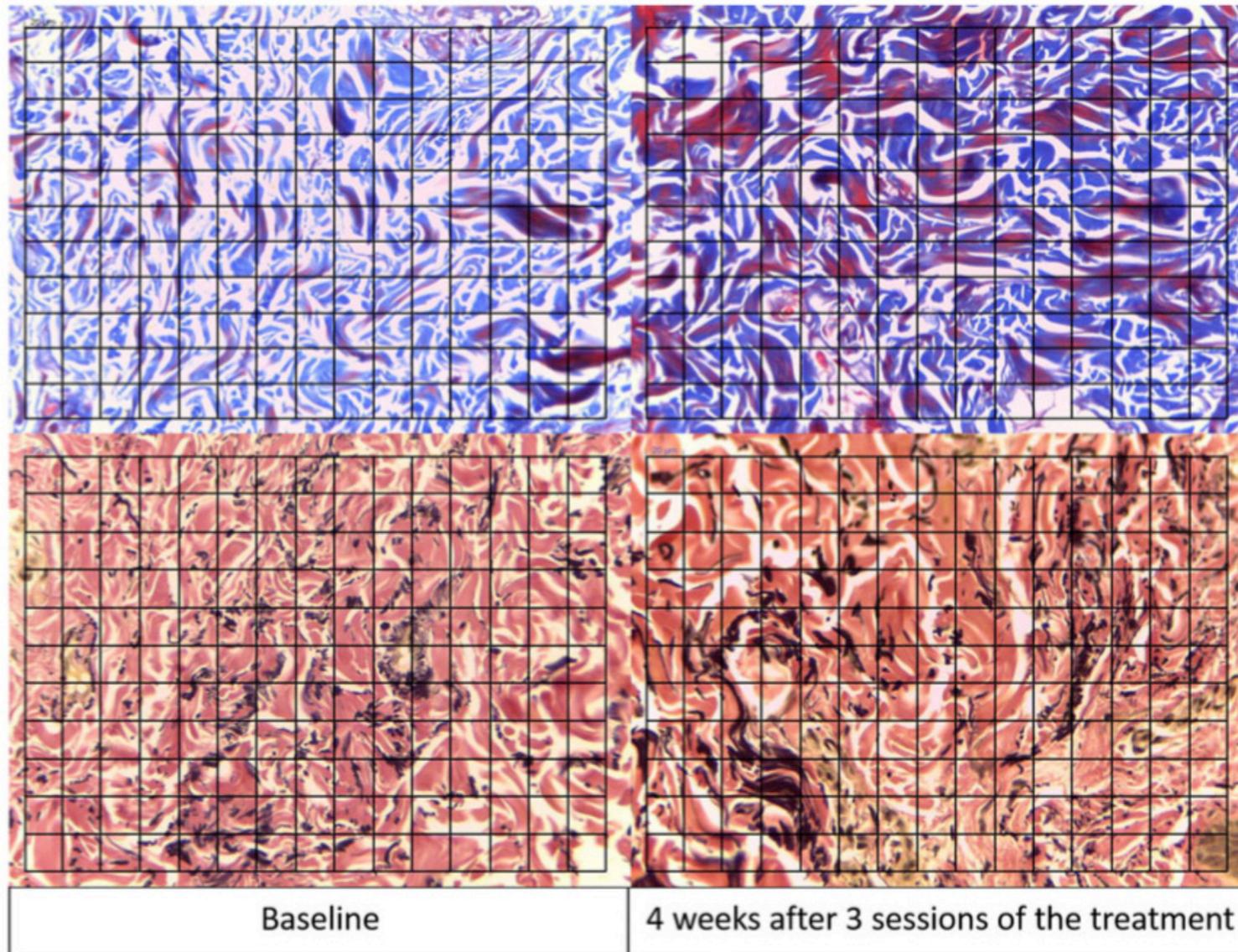
	% of Patients
TEXTURE	96.97%
SIZE	93.94%
OVERALL	96.97%

- Independent assessor: 69.7% of patients had >50% improvement
- PIH observed was low (18.1%) compared to 81.8% for fractional CO<sub>2</sub> laser and 36.4% for fractional Erbium glass laser

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## HISTOLOGICAL EXAMINATION OF DERMAL COLLAGEN AND ELASTIN



**Increase in number and thickening of collagen bundles and increase in number of elastin content at 4 weeks after the last treatment**