

VENUS VIVA™ STUDY:

AT LAST, AN EFFECTIVE
TREATMENT FOR STUBBORN
STRETCH MARKS


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Striae Distensae (SD), or stretch marks, are medically benign and asymptomatic, but this linear scarring of the skin is very distressing for those who suffer from it. Most women will experience striae, especially for whitened striae known as Striae Alba (SA).

Researchers at Srinakharinwirot University in Bangkok, Thailand have reported significant results using Venus Viva™, a device based on a patented form of fractional radio frequency called NanoFractional RF™.¹

The researchers conducted a clinical evaluation of the efficacy and safety of NanoFractional RF™ in a blinded before-after study on 33 subjects in Thailand with striae alba, the chronic form of SD that presents as white wrinkled dermal scars.

SUMMARY: KEY FINDINGS AND IMPLICATIONS

The results of the study by Dr. Napatthaorn Pongsrihadulchai and colleagues at Srinakharinwirot University published in the Journal of Cosmetic Dermatology in September 2016 were significant: Stretch marks decreased in length, width, and surface area after each treatment, starting at four weeks.

After 12 weeks and three treatments with Venus Viva™, a statistically significant reduction in total surface area was recorded.

In addition, collagen and elastin increased, with the study demonstrating significant treatment-induced dermal collagen and elastin production at four weeks after treatment.

PATIENTS WERE HIGHLY SATISFIED WITH THE RESULTS. THE SATISFACTION SCORES WERE "SATISFIED" AND "VERY SATISFIED" FOR CHANGES ON TEXTURE, SIZE, AND OVERALL IMPROVEMENT BEING 96.67%, 93.94% AND 96.97% RESPECTIVELY.

The study results confirmed:

- The availability of a safe, effective treatment for Striae Alba. Venus Viva™ has evidenced its efficacy with strong satisfaction among recipients and providers.
- For aesthetic practitioners who already offer Venus Viva™, this represents the potential to serve a new patient base.
- For practices seeking a multi-indication treatment, the findings underscore the value that Venus Viva™ brings as an effective and versatile therapeutic device.

EPIDEMIOLOGY, CLINICAL PRESENTATION, AND PATIENT CONCERNS



About 90 percent of pregnant women, 70 percent of adolescent girls, and 40 percent of adolescent boys have stretch marks.² Stretch marks affect patients of all skin types and backgrounds, and commonly appear on the chest, abdomen, buttocks, and thighs.

Demand for treatments is strong. In 2014, American consumers spent about \$161.4 million on creams intended to minimize pregnancy-related; and compound annual growth in this market of 5.7 percent is expected in this market through 2023.³

Striae distensae start out as reddish lesions, called striae rubra, which become white striae alba as they age. SD is caused by progressive stretching of the skin connective tissue due to changes in the contours of the body,⁴ but the precise pathogenesis is not well understood. Females are 2.5 times more susceptible than males.⁵

Embarrassment over striae is acute, and this condition has negative consequences for quality of life. One survey among women⁶ found that 81 percent of respondents felt self-conscious about stretch marks, 69 percent were eager to get rid of them and 20 percent have avoided having sex with the lights on because of striae.

Among sufferers of stretch marks that appeared as a result of pregnancy, respondents reported embarrassment (44 percent), helplessness (34 percent), and dread (22 percent).

HISTORICAL OVERVIEW OF TREATMENT MODALITIES

To date, there are very few effective treatments for SD, and most methods yield disappointing results. In lieu of a standard treatment, most therapeutic approaches aim to reduce the color and texture differences of striae from surrounding skin. Therapeutic approaches have sought to reduce the color and texture differences of striae from the surrounding skin.

For Striae Alba, the main interventions are topicals, such as chemical peels and retinoids, or therapies including pulsed dye lasers, ablative and non-ablative fractional lasers, microneedle radiofrequency, dermabrasion, and phototherapy. More recently, combination treatments such as fractionated microneedle radiofrequency with fractional carbon dioxide laser have been studied.⁴

Some studies have found fractional laser to be effective^{7, 8} but it causes hyperpigmentation in some patients, especially those with darker skin.^{9,10} Studies on non-ablative microneedle RF showed improvement of 30 to 50 percent in SA.¹¹

STUDY STRUCTURE

This study enrolled 33 subjects ages 18 to 60 with striae alba on their thighs, abdomen, or buttocks (11 each). They had Fitzpatrick skin types III-IV.

Each participant received three sessions of treatment with Venus Viva™ at four-week intervals.

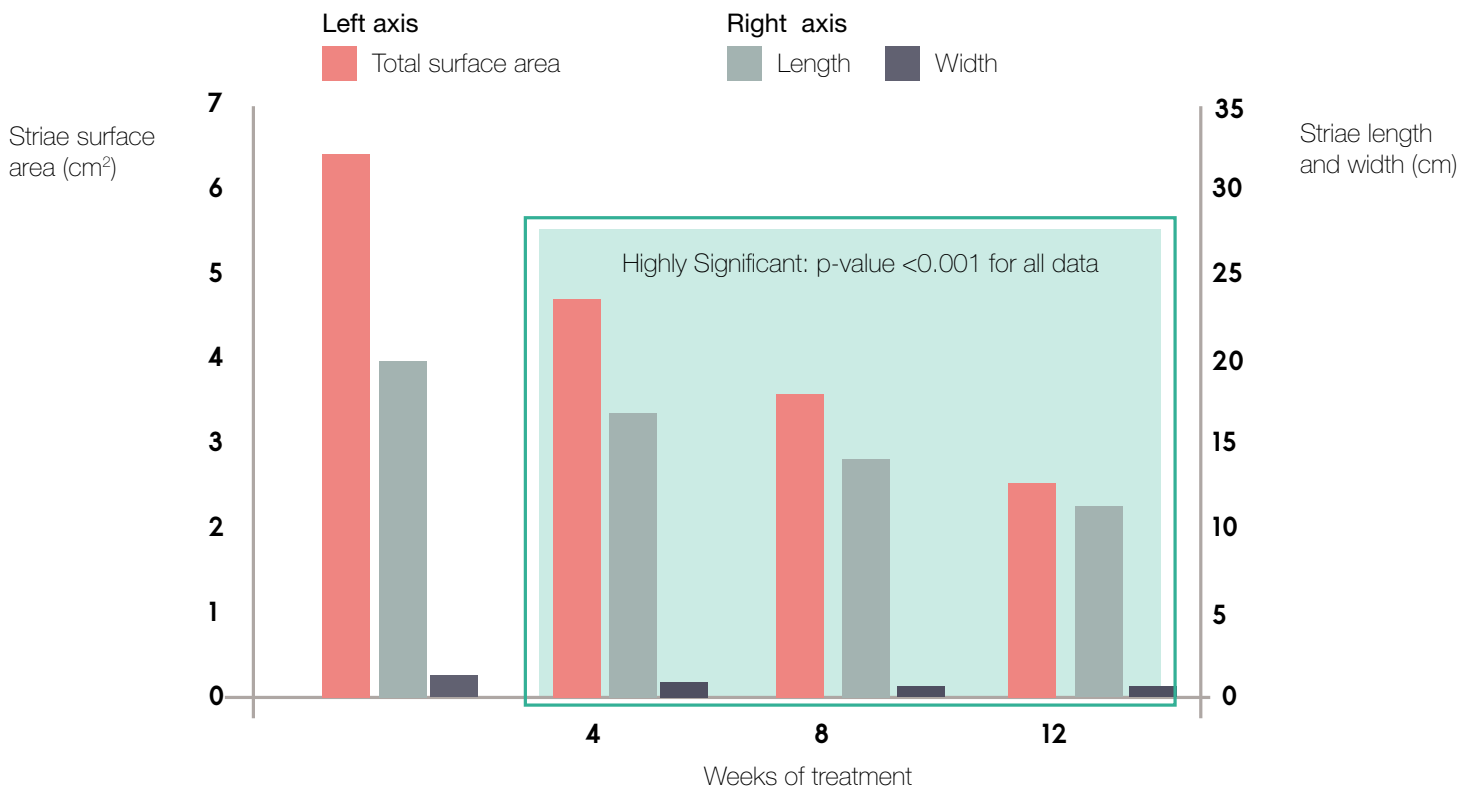
Clinical outcomes were assessed through pre- and post-treatment measurement of scar surface area, length, and width. Histopathological results were measured in terms of the changes in the number of collagen and elastin bundles.

KEY FINDINGS

The study results show efficacy for Venus Viva™ as a treatment for SA.

- Total surface area as documented by Pictzar™ software measurement decreased from an average mean of 6.21 cm² at baseline to 4.70, 3.55 and 2.55 cm² at consecutive intervals. P values < 0.001 indicate a high statistical significance. (See figure 1 – data adapted from Table 2, page 4)
- Average mean width and length also declined at each interval with a statistical significance of P < 0.001.

Decrease in Striae over Treatment Intervals



KEY FINDINGS

- Patient satisfaction increased over the course of the study. Patients' self-reported satisfaction scores of 4 and 5 (Satisfied and Very satisfied) for changes in texture, size, and overall improvement were 96.97 percent, 93.94 percent, and 96.97 percent, respectively.
- Physician satisfaction showed concordant results with about 69.7 percent of study participants rated as having greater than 50 percent improvement.
- The treatments were well tolerated with a mean pain score of 2.33 on a 0 to 10 scale.
- Postinflammatory hyperpigmentation (PIH) was observed in six patients, or 18.1 percent, and this improved with topical treatment with 4 percent hydroquinone. This compares to incidence of PIH of 81.8 percent for fractional CO2 laser and 36.4 percent for fractional Erbium glass laser.¹² The side effect of PIH with Venus Viva™ was similar to that of non-ablative.
- Collagen and elastin increases were noted at four weeks after treatment. At 12 weeks, a significant increase in the number of collagen and elastin bundles was observed compared to the baseline (P = 0.005 and 0.012, respectively). Moreover, the collagen bundles became thicker and more densely accumulated at upper dermis than the baseline.

"In conclusion, nanofractional RF is highly effective and safe for the treatment of Striae Alba," the study reported.



STUDY STRENGTHS AND ADVANTAGES OF VENUS **VIVA™**

The study was notable for its strong design, which included use of blinded assessors, an ample sample size, participation of subjects with darker skin tone, employment of objective measuring techniques, and statistically significant results.

In addition to being safe and effective, the authors noted that the small pin size of Venus Viva™ can reduce side effects and recovery time. In contrast to lasers, radio frequency technology does not target the chromophores on the skin, so it is considered to be safe for use with all skin types.



IS VENUS VIVA™ RIGHT FOR YOUR PRACTICE?

The potential to achieve improvement in stretch marks offers aesthetic practitioners a new opportunity to delight patients and improve their quality of life. Venus Viva™ can open new markets for your practice and serve as a multi-indication workhorse.

Venus Concept is a leader in aesthetic innovation. Working with leading practitioners in more than 60 countries, Venus Concept offers unmatched technology with a unique business model designed to maximize your ROI. Backed by continuous clinical education, ongoing marketing support, valuable practice enhancement programs, and the most comprehensive warranty program in the industry, Venus Concept is committed to your success.



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