

A Laser-Powered, Needleless Microjet Injector for the Novel Treatment of Striae Distensae

Background and Objectives

Patients have a strong preference for choosing non-invasive aesthetic procedures. The popularity of energy-based devices in recent years has been met with pause due to some of the side effects that can occur with these devices not limited to erythema, blistering, infection and pigmentary changes. Striae distensae (SD) is a common skin condition that affects males and females in areas such as the abdomen, breasts, thighs and buttocks and is associated with significant cosmetic morbidity. Topical medications, energy-based devices and surgical procedures have led to unsatisfactory and disappointing results in treating this prevalent condition. Here we report the success of utilizing a laser-based, needleless microjet transdermal drug delivery system for the treatment of this condition.

Study Design and Methods

Female patients with striae distensae were recruited to participate in this study at 5 different clinical centers. The patients were treated with a precise, controlled injection of PDLA solution through the microjet injection system at once or twice monthly intervals for a total of 5 treatments. Post-procedure side effects were minimal with transient bleeding.

Results

All patients in this study had significant improvement in the appearance of their striae distensae after a total of 5 treatments. Patient satisfaction of the procedure was also extremely high, due to the short nature of the treatment, quick recovery time and preclusion of needles or anesthesia.

Conclusion

Herein, we report the success of using a laser-powered needleless microjet injector for the viable treatment of striae distensae.

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