

BODY CONTOURING WITH A MULTIPLE DIODE LASER SYSTEM

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Background and Objectives: Transmission electron microscopic images have shown the formation of a transitory pore in the adipocyte membrane followed by complete deflation of adipocytes subsequent to laser exposure. The intent of this study was to evaluate the application of a multiple 635 nm and 7.5 mw exit power per diode laser for the application of body contouring of the waist, hips, and thighs.

Study Design/Materials and Methods: The study recruited 15 test subjects for a non-randomized, non-blinded single group study. Each subject received six total treatments with a multiple 635 nm and 7.5 mw exit power per diode laser (EML manufactured by Erchonia Medical Laser) across a consecutive two-week treatment administration phase; three treatments per week. The laser was applied to the front area of the subject's abdomen, hips, and right and left thighs for 20 minutes. The same procedure was repeated for the lower back, posterior portion of the hips and right and left thighs. Prior to each treatment, the subjects Body Mass Index (BMI) and circumference in inches of waist, hips, and each of the left and right thighs were evaluated.

Results: Preliminary data has indicated an average decrease in inches of -1.28 inches for the waist; -1.34 inches in hips, and -1.73 inches in the right thigh and -1.50 inches in the left thigh at the end of week two. 87.5% of subjects demonstrated a decrease in waist circumference after two weeks. A similar percentage was observed for the hips and thighs. 75% of subjects had a reduction in circumference of their hips, while 81% of subjects had a decrease in left and right thigh circumference.

Conclusion: These preliminary data suggest that low-level laser therapy can reduce overall circumference of specifically treated regions.