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**PHOTOTHERMAL THERAPY OF CELLULITE
WITH A CONTINUOUS WAVE (CW)
INFRARED SOURCE**

**S. Laughlin,¹ I. Yaroslavsky,¹ D. Manstein,²
G. Altshuler,² and R.R. Anderson³**

¹*University of Ottawa, Ottawa, Ontario, Canada*

²*Palomar Medical Technologies, Inc., Burlington, MA*

³*Wellman Laboratories, Boston, MA*

Background and Objectives: Heating deeper dermis and subcutis may be a treatment for cellulite. An innovative combination of a CW broad-band infrared source and parallel contact cooling was developed to attain controlled profiles of elevated temperatures. In vitro and animal experiments established that this technique was feasible. Our study investigated the use of this technique to treat cellulite in human volunteers.

Study Design/Materials and Methods: Fourteen female patients were treated with the infrared device on one thigh. Seven patients (group A) also applied a topical retinoid daily to the treated site. The other half (group B) received only IR treatments. The untreated thigh served as a control. The efficacy of treatment was assessed using blinded expert evaluation and patient questionnaire.

Results: Thermal imaging demonstrated a significant reduction in the non-uniformity of skin temperature at the treated sites in group B subjects compared to the control. By the end of treatment and 1-month follow-up, no significant changes were observed in group A subjects. Experts and patients agreed that all subjects achieved mild/moderate improvement in the appearance and texture of the treated thigh. Adverse effects were associated with 4 of 112 treatments in 2 of the 14 patients.

Conclusions: Broadband continuous wave infrared light applied with contact cooling appears to be a safe and effective method to reduce the severity of cellulite.