

Study

A Study on the Use of a Novel Light and Heat Energy System to Treat Acne Vulgaris

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Phototherapy has long been known to have a beneficial effect on acne vulgaris. With the widespread use of lasers and light-based devices for a plethora of dermatologic and aesthetic applications, the quest for a light-based acne treatment modality has led to the recent introduction of several different devices aimed at allowing safe, rapid treatment of inflammatory acne without the risks associated with antibiotic acne medications.

Fifty patients with mild to severe acne participated in a multicenter, blinded, controlled study to evaluate the safety and effectiveness of a novel light and heat energy (LHE™) system. The system is designed to utilize all photothermal phenomena known to have a positive effect in the treatment of mild to severe inflammatory acne.

The study included 3 phases: a control period, treatment period, and follow-up period. The patients served as their own control by forgoing any acne treatment for 4 weeks. After completion of the control period, the patients were treated twice a week for 4 weeks. Two independent, blinded evaluators documented inflamed lesion counts at the time of enrollment, at the end of the 4-week control period (baseline), and at the 4-week follow-up visit.

In 75% of the treated areas, a 50% or greater reduction in the number of inflamed lesions was recorded following the treatment regimen. Following the follow-up phase, a mean reduction of 60.2% was achieved compared with an increase of 32.4% in the control phase. Erythema was the only side effect reported, and was minimal and transient in all cases. LHE appears to be a safe and effective treatment alternative for mild to severe acne vulgaris, without the undesirable side effects associated with other treatment modalities.