Light therapy in the treatment of acne vulgaris.

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Abstract

BACKGROUND: Over the past decade, lasers and light-based systems have become a common modality to treat a wide variety of skin-related conditions, including acne vulgaris. In spite of the various oral and topical treatments available for the treatment of acne, many patients fail to respond adequately or may develop side effects. Therefore, there is a growing demand by patients for a fast, safe, and side-effect-free novel therapy.

OBJECTIVES: To address the role of light therapy in the armamentarium of treatments for acne vulgaris, to discuss photobiology aspects and biomedical optics, to review current technologies of laser/light-based devices, to review the clinical experience and results, and to outline clinical guidelines and treatment considerations.

RESULTS: Clinical trials show that 85% of the patients demonstrate a significant quantitative reduction in at least 50% of the lesions after four biweekly treatments. In approximately 20% of the cases, acne eradication may reach 90%. At 3 months after the last treatment, clearance is approximately 70% to 80%. The nonrespondent rate is 15% to 20%.

CONCLUSIONS: Laser and light-based therapy is a safe and effective modality for the treatment of mild to moderate inflammatory acne vulgaris. Amelioration of acne by light therapy, although comparable to the effects of oral antibiotics, offers faster resolution and fewer side effects and leads to patient satisfaction.

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