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Biostimulation Laser Acne Treatment

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Introduction

Acne is a result of increased functionality of sebaceous glands and abnormal cornification around hair follicles. It creates a plug in the ostium of the follicles, which mechanically reduces the excretion of excessive sebum production. Sebum accumulates and causes enlargement of follicles. Sebum pressure in the vicinity of sebaceous glands causes an inflammatory response, while there are biochemical changes in retained sebum and growth of bacteria that are in small quantities in the skin usually present (propionibacterium acne). This leads to an inflammatory reaction around the follicles and glands and various severe acne clinical images.

The above-mentioned key mechanisms operate a number of external and internal factors such as inheritability, hormonal influences, climatic and psychological effects, and other causes. Treatment of acne is complicated and must always be complex, often in cooperation with the endocrinologist and gynecologist.

Method

Laser biostimulation in the treatment of acne has a threefold effect. First, anti-inflammatory for acute eruption leads to faster healed inflammatory papule, secondly, it increases the long-term immunological stamina of skin and third, it applies a positive effect in the incidence of scar formation, especially in painful hypertrophic scars.

Laser with 670nm red light penetrates

through the skin to deeper structures, increases the metabolism in tissues, oxidizes skin and stimulates the healing of inflammatory processes.

The laser therapy was performed by MediCom Maestro laser with automatic scanner LineScan 670nm/30mW. Therapy can be performed also with the point laser probe for smaller lesions, but the Linescan delivers even irradiation of necessary dosage to larger areas. Time exposure of the face is 30 minutes 1-2 times a week. The eyes are protected by eyeshields.

Results

Treatment is presented on a 17 year old patient with two years persisting classical symptoms of acne vulgaris. The patient was not specifically treated and used only commonly available cosmetic acne solutions. The first examination dominated by multiple small acne papules, virtually all excoriated and a quantity of white and black comedons.

Therapy consisted of a series of 13 applications of biostimulation laser 1x per week and anti-acne therapy - a chemical peeling, cosmetic cleaning of comedons, locally curative cosmetics and pharmaceuticals under physician recommendations.

Conclusion

Laser biostimulation enhances the status of the skin in the treatment of acne and in our clinic is an essential part of a comprehensive treatment of this disease.



CLINICAL REPORT

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Before treatment



After treatment



Before treatment



After treatment

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