Alopecia

J Cosmet Laser Ther. 2006 Apr;8(1):27-30.

Use of the pulsed infrared diode laser (904 nm) in the treatment of alopecia areata.

Waiz M, **Saleh AZ**, **Hayani R**, **Jubory SO**.

Department of Dermatology and Venereology, Baghdad Teaching Hospital, Baghdad, Iraq. raafahayani@yahoo.com

BACKGROUND: Alopecia areata is a rapid and complete loss of hair in one or several patches, usually on the scalp, affecting both males and females equally. It is thought to be an autoimmune disease which is treated with different modalities with variable success. Laser treatment of different wavelengths has been used in the management of this problem. OBJECTIVE: To study the effect of the pulsed infrared diode laser (904 nm) in the treatment of alopecia areata. Methods. Sixteen patients with 34 resistant patches that had not responded to different treatment modalities for alopecia areata were enrolled in this study. In patients with multiple patches, one patch was left as a control for comparison. Patients were treated on a four-session basis, once a week, with a pulsed diode laser (904 nm) at a pulse rate of 40/s. A photograph was taken of each patient before and after treatment. RESULTS: The treated patients were 11 males (68.75%) and five females (31.25%). Their ages ranged between 4 and 50 years with a mean of 26.6+/-SD of +/-13.8, and the durations of their disease were between 12 months and 6 years with a mean of 13.43+/-SD of +/-18.34. Regrowth of hair was observed in 32 patches (94%), while only two patches (6%) failed to show any response. No regrowth of hair was observed in the control patches. The regrowth of hair appeared as terminal hair with its original color in 29 patches (90.6%), while three patches (9.4%) appeared as a white villous hair. In patients who showed response, the response was detected as early as 1 week after the first session in 24 patches (75%), while eight patients (25%) started to show response from the second session. CONCLUSION: The pulsed infrared diode laser is an effective mode of therapy with a high success rate for resistant patches of alopecia areata.

THE LOW INTENSIVE LASER THERAPY OF ALOPECIA

Nikiforova N. B.
Municipal Polyclinic, Vladivostok, Russia

Recently a great deal of men and women suffer from quantitative and qualitative disorders of hair growth of diverse etiology. Based on the property of low intensive laser

radiation to activize substantially the microcirculation and to enhance metabolic and regulate neurohumoral processes, the author seeks to normalize by means of laser circulation the functioning of hairy follicle and to reduce degeneration-dystrophic processes in derma which result in disorder of hair regeneration. Therapeutic laser apparatus with the wavelength of 0,63 and 0,89 mm were used for the treatment. A course of therapy consists of 10-15 procedures. Depending on a complication of the disease a patient underwent 1 to 3 courses with the intervals of 1, 3 and 6 months. 78 patients (17 men and 61 women) at the age of 16 to 49 years old have been treated. Diseases have been caused by strong stresses, after-effects of surgical treatment, ovary and thyroid gland dysfunctions, gastroenteric diseases etc. A considerable improvement of hair quality, recovery of pigment, increase in thickness and rate of hair growth (50-100%) were observed in all cases. An intensive alopecia was ceased among 100% of patients. By the end of the first course a daily number of fallen hairs was in accordance with the norm. By the end of the third week an appearance of new hairs was observed along the front line of growth in 90% of patients. Out of 24 patients underwent three medical treatments the problem was completely solved for 23 of them. The effectiveness of laser method in the treatment of alopecia is confirmed

Int J Dermatol. 2003 Sep;42(9):738-40.

Linear polarized infrared irradiation using Super Lizer is an effective treatment for multiple-type alopecia areata.

Yamazaki M, Miura Y, Tsuboi R, Ogawa H.

Department of Dermatology, Juntendo University School of Medicine, Tokyo, Japan. yamazaki@med.juntendo.ac.jp

BACKGROUND: Super Lizer trade mark is a linear polarized light instrument, which has been used with good effect in orthopedics and anesthesiology to treat arthralgia and neuralgia with a high output of infrared radiation. AIM: To test Super Lizer trade mark 's efficacy for the treatment of alopecia areata. METHODS: Fifteen patients over 18 years of age, diagnosed with alopecia areata and displaying symptoms of patchy hair loss, were topically irradiated with infrared radiation using the Super Lizer trade mark. The patients were irradiated intermittently for an interval of 3 min once every week or every 2 weeks. RESULTS: Seven of 15 (46.7%) of the irradiated areas showed hair regrowth 1.6 months earlier than the nonirradiated areas (chi2 official approval, P = 0.003). With regard to adverse effects caused by Super Lizer trade mark treatment, only one patient complained of a sensation of heat in the irradiated area. CONCLUSIONS: These findings suggest that Super Lizer trade mark, with its noninvasive properties, is a useful apparatus for the treatment of mild forms of alopecia areata.