



NAIL DISORDERS

AN UPDATED LOW LEVEL LASER THERAPY FOR PATIENTS WITH ONYCHODYSTROPHY.

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Introduction and objectives: Onychodystrophy is a term that describes trophic change of a nail plate, nail bed and nail wall. In recent years much attention is paid to development a laser therapy method with use of infrared low level laser radiation for this pathology.

Materials and methods: 80 patients with noninfectious lesions of nails aged from 20 till 55 years were enrolled in the study. For the purpose of improvement of microcirculation and trophic processes, photophoresis of the preparation, containing biotin was executed. Parameters of influence: low level laser radiation of infrared range with 0,89 mcm wave length, with 1500 Hz pulse repetition frequency, at the pulse power of 4 - 6 W /imp, by a contact and labile technique, for 1 minutes in the field, on a course – 15 daily procedures. To assess efficiency of therapy modification of NAPSI (Nail Psoriasis Severity Index) and DLQI (Dermatology Life Quality Index) were used. Data were estimated before treatment and in 4, 6, 8 months from the therapy beginning.

Results: Before treatment NAPSI in 56,2% of patients were $53,4 \pm 7,2$, in 43,8% - $32,4 \pm 6,8$. DLQI in group averaged $18,9 \pm 1,4$. In patients with isolated hand nail lesions in 4 months from the beginning of treatment NAPSI decreased by 32% and averaged $38,3 \pm 4,5$. At the combined involvement the index decreased by 22,2% ($42,1 \pm 5,1$). In 6 months NAPSI in all group averaged $23,1 \pm 3,6$ (decreased for 57,1%), and in 8 months decreased by 81,9%. According to clinical course of a disease, patient's quality of life has improved. DLQI in 4 months decreased by 36,6% and reached $12,2 \pm 3,1$, and in 6 and 8 months it attained $8,1 \pm 1,2$ and $4,2 \pm 2,3$ respectively.

Conclusions: Addition of biotin photophoresis in complex treatment for onychodystrophy allows to increase efficiency of therapy, that positively influences quality of life in patients.

