ОПТИЧЕСКИЕ ТЕХНОЛОГИИ, Постер

APPLICATION OF THE COMBINED EFFECT OF LASER AND EHF-IRRADIATION OF "MATRIX" ON THE PATIENTS WITH GINGIVITIS AND PERIODONTITIS

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ТЕЗИСЫ

One of the most significant effects of helium- neon laser radiation is a positive effect on the microcirculatory disturbances.
The increase of antithrombin- III activity- the most important primary anticoagulant occurs under the laser radiation.
The generation of secondary weak EHF-radiation is one way of effect's implemention of laser radiation.
Studies have been conducted to research the possibility for correction of platelet adhesive and aggregation activity of patients with inflammatory periodontal diseases after a course of complex treatment included combined effect of laser and EHF radiations as a component of the pathogenetic therapy directed toward the correction of microcirculatory disorders.
20 patients with gingivitis and 40 with periodontitis have been monitored. The combined effect of the laser and EHF-irradiation of "Matrix" has been included in complex treatment. Treatment with "Matrix" of affected area has been carried out using the adapter washer witch was supplied with the thread M 24 x 1, for 2 minutes per zone and radiating heads EHF - LO EHF with a wavelength 4.9, for 2minutes at the same zone.
Comparison of patients' index before and after treatment has given better clinical results after treatment with "Matrix", and the index difference have been reliable ($p < 0,05$).
The obtained data have shown the high efficacy of the combined effect of laser and EHF-irradiation as a pathogenetic therapy to normalize microcirculation disorders hemostasis.

One can suppose that the observed inhibition effect of platelet functional activity has mediated retseptoro- and membranotropic action of classical EHF radiation.

Thus, the use of combined effect of laser and EHF-irradiation of "Matrix"allows to stop inflammation in periodontal tissues and prepare patients for surgical treatment, prevents the development of complications.

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