

New Method Of Atherosclerotic Macular Dystrophies Treatment

[Article in Russian]

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The authors analyze the results of treating atherosclerotic maculodystrophies by direct laser phoresis. The method consists in insertion of a collagen infusion system in Tenon's space. Drugs (nicotinic acid or xanthinol nicotinate) are delivered to the posterior compartment of the eye through this system. Then a light guide is inserted in the tube and a 2-min session of low-intensity He-Ne laser exposure is performed at a wavelength of 630 nm, and 10 mWt/cm² flow power density (7 to 10 sessions per course). Clinical studies showed that vision acuity increased by an average of 0.08 diopters, or by 40% of the initial level, in 72% of cases. The peripheral visual field extended by an average of 51.4 degrees for 8 meridians in 95% of patients. The index of critical frequency of flashings fusing and the frequency-contrast characteristics improved in 85% of cases. The rheography improved by 34.5% of the initial level. A stable improvement was observed for 12 months after a course of direct laser phoresis in 97.5% of patients. Hence, the new method is simple and recommended for the treatment of atherosclerotic maculodystrophies.

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Dependence Of The Efficiency Of Low-Intensity Laser Therapy In Involution Chorioretinal Dystrophy On A Used Wavelength

[Article in Russian]

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Seventy-five patients (75 eyes) with central involution chorioretinal dystrophy (non-exudative type at the progression stage) were followed up. All of them received low-intensity laser therapy. Irradiation of 890 nm, 644 nm and 500 nm was used in groups 1, 2 and 3, respectively. The study purpose was to compare the efficiency of wavelengths. Visual acuity and retinal sensitivity were determined. The results were evaluated immediately after treatment and in 3 months. The maximal improvement in visual acuity and retinal sensitivity was in those who received 890 nm laser therapy; 500 nm irradiation--a less pronounced effect and 640 nm--the lowest one. We attribute such distribution of efficiency to a proliferation type of each irradiation range in the macular zone.