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damage of the optic nerves caused by pathological processes in the opticochiasmic area of the brain (tumors of the hypophysis, arachnoiditis, the sequelae of trauma). The novelty of the method lies in introducing electrodes under the nerve sheath during operation performed for the main pathological process and producing direct electrostimulation (ES) of the nerves for 3-4 weeks after the operation. The authors chose the optimum parameters of therapeutic ES under control of a direct record of the bioelectrical activity of the optic nerves and ophthalmological examination of the patients. Positive therapeutic effect was obvious in three fourths of patients, in one third of whom vision was completely normalized. The results of using the new method of implantation of electrodes into the optic nerves and the probable mechanisms of the restoration of vision under the effect of their direct ES are discussed.

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function was unchanged in the Acustat group. Peak plasma creatine kinase activity was also lower in the Acustat group (peak = 777 ± 1438 U·L–1) versus the placebo group (peak = 1918 ± 2067 U·L–1; (P < 0.05). The membranes were well tolerated by the subjects in both groups without any adverse effects. Conclusion: These data show that treatment of muscle damage with Acustat electro-membrane microcurrent therapy reduces the severity of the symptoms. The mechanisms of action are unknown but are likely related to maintenance of intracellular Ca2+ homeostasis after muscle damaging exercise.

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