

APPLICATION OF MICRO-PULSE LASER TRABECULOPLASTY (577 NM) IN PRIMARY OPEN-ANGLE GLAUCOMA

Nasinyk I.O.¹, Popova O.I. ², Zadorozhnyy O. S.¹, Kustryn T. B.¹, Korol A. R.¹

1. SI "The Filatov Institute of Eye Diseases and Tissue Therapy NAMS of Ukraine" (Odesa)

2. St. Luke's Hospital (Kropivnytskyi)

AIM. To evaluate the possibility of using micropulse trabeculoplasty with a laser with a wavelength of 577 nm in patients with primary open-angle glaucoma.

MATERIALS AND METHODS. A retrospective study of the treatment outcomes of patients with primary open-angle glaucoma who received micropulse laser trabeculoplasty from 2017 to 2023. We compared the level of intraocular pressure before the intervention, after 2 weeks and 12 weeks, as well as the regimen of drug anti-glaucoma therapy.

RESULTS. 33 patients (33 eyes) were under observation. In 29 patients (88%), the decrease in mean IOP after micropulse laser trabeculoplasty was statistically significant ($P < 0.001$). In 4 patients (12%), the results of treatment were without a statistically significant difference ($P > 0,05$). In all cases, the regimen of glaucoma medications before and after laser intervention did not change.

CONCLUSION. Micropulse laser trabeculoplasty (wavelength 577 nm) in the conducted study led to IOP compensation in 88% of patients with primary open-angle glaucoma during the observation period of 12 weeks and maintaining the regimen of instillation of anti-glaucoma drugs.