

**SUBTHRESHOLD MICROPULSE LASER IN THE TREATMENT OF CHRONIC  
CENTRAL SEROUS CHORIORETINOPATHY – FUNCTIONAL AND  
MORPHOLOGICAL OUTCOMES**

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**PURPOSE:** To evaluate the effectiveness of subthreshold micropulse laser (SMPL) in treating chronic central serous chorioretinopathy (CSCR).

**METHODS:** 27 patients (22 male and 5 women; mean age 36,9 years, range 30-47) who suffered from long-term chronic CSCR were treated by SMPL (Iridex IQ yellow 577 nm), by use of 5% duty cycle of 0.2 seconds, with a spot size of 100 µm, a power of 250 mW in a dense confluent grid pattern of laser spots 7x7. Best-corrected visual acuity (BCVA), central macular thickness (CMT), and macular volume (MV) were determined in all patients using optical coherence tomography (OCT) just before SMPL treatment and 1, 2, 3, and 6 months after the SMPL treatment.

**RESULTS:** All observed parameters showed a significant improvement after applying SMPL. Mean BCVA (using Snellen charts) before SMLP was 0,742±0,0857 vs.0,923±0,0863 (F 284.813; p 0.005); mean CMT before SMLP was 387,2±13,4 vs. 279,4±26,7 µm (F 318.395, p 0.005); mean MV before SMLP was 11,04±0,445 vs. 10.15±0,675 mm<sup>3</sup> (F 38.502, p 0.005). All observed parameters showed statistically significant improvement after three months from the first SMPL treatment.

**CONCLUSIONS:** SMPL in the treatment of chronic CSCR results in significant morphological and functional improvement.

**FINANCIAL DISCLOSURE:** No