

Prednisolone eye drops as a potential treatment in non-neovascular pachychoroid related diseases

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Purpose: To investigate the functional and structural outcomes after treatment with prednisolone eye drops in the following pachychoroid related diseases: chronic central serous chorioretinopathy (cCSC), pachychoroid pigment epitheliopathy (PPE) and peripapillary pachychoroid syndrome (PPS).

Methods: In this retrospective study, 54 eyes of 48 patients with pachychoroid related disease were treated with prednisolone acetate 1% eye drops for 3 times a day. Change in macular volume and retinal central subfield thickness on optical coherence tomography was measured. In addition, foveal or complete resolution of fluid and the change in visual acuity (VA) were studied.

Results: The follow-up visit was at a mean of 41.2 ± 14.5 days. In the 44 eyes with cCSC, a significant reduction in retinal central subfield thickness ($p < 0.001$) and macular volume ($p < 0.001$) was observed. Foveal intra- or subretinal fluid resolved completely in 22% of the eyes. In the 8 PPS eyes, a reduction in the nasal retinal thickness was observed ($p = 0.025$). One of the 2 PPE eyes showed structural improvement. No significant

change in VA was observed in any of the pachychoroid spectrum diseases.

Conclusions: In cCSC, PPS and PPE patients, anatomical improvement was observed after therapy with prednisolone eye drops. VA did not change significantly.