EVALUATION OF THE EFFECT ON PROGNOSIS OF THE FIRST TREATMENT CHOICE (LASER PHOTOCOAGULATION OR INTRAVITREAL RANIBIZUMAB) APPLIED IN STAGE 4A RETINOPATHY OF PREMATURE

E. Alyamaç Sukgen, Y. Koçluk
Ophthalmology, Adana Numune training and research hospital, Turkey

Purpose: Stage 4A retinopathy of prematurity (ROP) is a critical phase where ROP progresses but fovea is preserved. The present study aims to evaluate the effect on the prognosis of the first treatment choice (laser photocoagulation (LFC) or intravitreal ranibizumab (IVR)) applied in this critical phase of the disease. Methods: Records of the patients who were diagnosed with stage 4A ROP and whose first treatment was applied in our clinic were evaluated retrospectively. While group 1 was composed of the patients who were administered LFC as first treatment, group 2 included patients who were applied IVR as first treatment. The patients were referred to surgical treatment in the presence of progression in both groups. Results: The present study included a total of 31 eyes in 16 patients (9 males and 7 females) with stage 4A ROP. 18 eyes of 9 patients in group 1 were first applied LFC, and 13 eyes of 7 patients in group 2 were first applied intravitreal ranibizumab. 44.4% (8/18) of the patients in group 1 and 23% (3/13) patients in group 2 displayed progression and were referred to vitreoretinal surgery. Conclusion: In some patients, stage 4A ROP can regress without vitreoretinal surgery with IVR or LFC applied as monotherapy in early phase. The eyes which demonstrate progression despite the treatment are the ones which demonstrated partial retinal detachment with wider involvement. Although the effect of the first treatment choice (LFC or IVR) on prognosis was not found to be statistically significant between the groups, performing IVR as first treatment creates a basis for an effective laser treatment. Financial Disclosure: No