

18th Joint event on

EUROPEAN OPHTHALMOLOGY CONGRESS & OCULAR PHARMACOLOGY

December 04-06, 2017 | Rome, Italy

Intravitreal bevacizumab for treatment idiopathic peripapillary choroidal neovascular membranes

Gleb M Arslanov, Nikita Yu Dal and Maria I Krasavina

Saint-Petersburg, Research & Education Centre for EBM Cochrane, Russia

Statement of the Problem: A significant part of cases (according to the literature about 40%) peripapillary choroidal neovascular membranes (PCNV) not associated with anything retinal pathology and described as "idiopathic". This presents difficulties in determining the tactics of these patients. PCNV remains poorly understood and requires further research.

Purpose: The purpose of this study is to describe the results of treatment three patients (intravitreal bevacizumab) in case series with active PCNV which not associated with other retinal pathology (AMD, polypoidal vasculopathy, angioid streaks, degenerative myopia, serpiginous choroiditis).

Methodology & Theoretical Orientation: Three eyes were included in the study (3 patients, 1 male and 2 woman). The median age was 71.3 years old (65-76). The methods of examination and control were BCVA, ophthalmoscopy, fundus photography and optical coherence tomography (OCT). Fluorescence angiography (FA) was performed to confirm the activity of PCNV and further according to indications, depending on changes in the clinical findings and OCT. Injections were administered monthly in the first three months, then treatment was repeated (depending of activity PCNV on OCT and FA). The median follow-up period was 6.6 months (4-10). The median number of injections was 4.6 (3-6).

Findings: Improvement BCVA was observed in one patient (from 20/50 to 20/30), one noted stable (at 20/40) and one was reduction (from 20/30 to 20/50), despite the monthly treatment (5 injections) and continued edema by OCT. Thus, inhibition of PCNV activity confirmed by OCT and FA was observed only in two patients. There were no any systemic and side effects.

Conclusion & Significance: Intravitreal administration of bevacizumab (as first-line therapy) is sustainable, effective and safe approach to prevent loss of vision in cases of PCNV. There are refractory cases which requires a revision of approaches in treatment. We suggested that they should respond better to combination therapy.

Recent publications:

1. Adrean SE, Grant S, Chaili S (2017) Bevacizumab (Avastin) and thermal laser combination therapy for peripapillary choroidal neovascular membranes. *Journal of Ophthalmology*. 2017:4802690.
2. Davis A S, Folk J C, Russell S R, Sohn E H, Boldt HC, Stone EM, Mahajan VB (2012) Intravitreal Bevacizumab for Peripapillary Choroidal Neovascular Membranes. *Arch Ophthalmol*. 130(8):1073-75.
3. Jutley G, Jutley G, Tah V, Lindfield D, Menon G (2011) Treating peripapillary choroidal neovascular membranes: a review of the evidence. *Eye (Lond)* 25(6):675-681.
4. Hoeh A E, Schaal K B, Ach T, Dithmar S (2009) Treatment of peripapillary choroidal neovascularization with intravitreal bevacizumab. *Eur. J. Ophthalmol*. 19(1):163-165.
5. Figueroa M S, Noval S, Contreras I (2008) Treatment of peripapillary choroidal neovascular membranes with intravitreal bevacizumab. *British Journal of Ophthalmology*. 92(9):1244-1247.

Biography

Gleb M Arslanov studied general medicine in Bashkir State Medical University (Ufa, Russian Federation) and passed Department of Ophthalmology with Institute of Postgraduate Education course on specialty "Ophthalmology" in 2014. Medical work builds on principles of evidence-based practice. Main professional interests are devoted to diagnosis and treatment of retinal (age-related macular degeneration, diabetic retinopathy and retinal vein occlusions), optic nerve (glaucoma) and choroid diseases (uveitis).

gleb@arslanow.ru