

## **Intravitreal Bevacizumab as Isolated First Line Therapy in Patients with New Untreated Choroidal Neovascular Membranes**

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### **PURPOSE**

To determine results of intravitreal bevacizumab in patients with choroidal neovascular membranes (CNVMs) of different types and etiologies.

### **METHODS**

Prospective nonrandomized consecutive case series of 65 eyes with recent untreated CNVMs of various etiologies (ARMD, myopic, idiopathic, peripapillary, IPCV, RAP) who were treated with intravitreal injection of bevacizumab 1.25 mg/0.05 mL. Patients underwent ophthalmoscopic examination, ETDRS visual acuity (VA) testing, fundus fluorescein angiography (FFA) and optical coherence tomography (OCT) imaging, at baseline and follow-up visits. Main outcome measures included changes in LogMar ETDRS VA, OCT retinal thickness, angiographic lesion characteristics and safety and retreatment rate at 5 months follow-up. Repeat injections were performed only if deemed necessary.

### **RESULTS**

At 5 months follow-up, all 65 eyes showed complete closure of CNV lesions and resolution of macular edema, subretinal fluid and pigment epithelial detachment. The mean VA improved from 1.06+0.36 (LogMar ETDRS) to 0.655+0.26 at end of 5 months follow-up ( $p < 0.001$ , paired t-test). The median central retinal thickness at 5 months post-treatment was 244 as compared to 196 at baseline ( $p < 0.005$ , paired t-test). Only 14/65 eyes required a second intravitreal injection of bevacizumab after 6 weeks. No eyes needed more than 2 injections at 5 months follow-up. No significant ocular or systemic side effects were observed.

### **CONCLUSION**

Intravitreal bevacizumab results in improvement in VA, decreased retinal thickness and reduction in angiographic leakage. It may be effective as isolated first line therapy in all types of choroidal neovascularization.