INTRAVITREAL BEVACIZUMAB FOR SYMPTOMATIC RETINAL ARTERIAL MACROANEURYSM

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Purpose: To evaluate the therapeutic effect of intravitreal bevacizumab injection for symptomatic retinal arterial macroaneurysm.

Methods: This retrospective study included 23 patients (23 eyes) with symptomatic retinal arterial macroaneurysm. They were categorized according to treatment method into 2 groups: an intravitreal bevacizumab-treated group (11 eyes) and an untreated group (12 eyes). Bevacizumab was injected at the initial visit, followed by as-needed monthly reinjection.

Results: The mean follow-up period for all subjects was 10.83 ± 4.6 months. The mean number of injections for the treated group was 1.42 ± 0.69. The mean logarithm of the minimum angle of resolution (logMAR) of best corrected visual acuity (BCVA) improved from baseline at the last follow-up by 0.26 in the bevacizumab-treated group (p = 0.02) and by 0.34 in the untreated group (p = 0.005). Average central macular thickness (CMT) decreased from 384.4 ± 150.1 μm to 265 ± 112.5 μm in the bevacizumab-treated group (p = 0.0002) and from 413.2 ± 155.2 μm to 236.3 ± 103.5 μm in the untreated group (p = 0.008). The BCVA was significantly improved from baseline after 1 month in the bevacizumab-treated group (p = 0.03) and after 3 months in the untreated group (p = 0.01). However, there was no statistically significant difference in BCVA improvement or CMT improvement achieved at the final visit.

Conclusions: Intravitreal bevacizumab injection seems to facilitate resolution of macular edema and hemorrhage secondary to retinal arterial macroaneurysm. Intravitreal bevacizumab injection could be an effective treatment option for symptomatic retinal arterial macroaneurysm.