

Treatment of Neovascular Age-related Macular Degeneration with Intravitreal Bevacizumab (Avastin®): Efficacy of 3 Consecutive Monthly Injections

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PURPOSE

Do 3 consecutive monthly injections of intravitreal bevacizumab (Avastin®) produce a sustained clinical improvement in eyes with neovascular age-related macular degeneration?

METHODS

We performed a retrospective review of consecutive eyes with all choroidal neovascular lesion subtypes due to neovascular age-related macular degeneration treated with intravitreal bevacizumab at the Duke University Eye Center. Treatment consisted of a pars plana injection of 1.25 mg of bevacizumab into the vitreous cavity monthly for 3 months. The following parameters were recorded at the initial visit and at each follow-up visit: subjective changes, review of systems, visual acuity, intraocular pressure, clinical exam, and optical coherence tomography. Fluorescein angiography was recorded at the initial visit and select follow-up visits.

RESULTS

29 patients were identified in this preliminary review. The average follow-up period was 6.07 months. 26 of 29 patients received 3 or more injections. 17 eyes had received some previous treatment for their disease (including macugen or photodynamic therapy). The median visual acuity among all eyes in the study was 20/126 pre-injection, 20/80 at 1 month and 20/160 at final follow-up. The median change in foveal thickness was -71.00 at 1 month and -43.00 at final follow-up. Among the subgroup that had previous treatment for AMD (N=17) the median visual acuity was 20/160 at baseline, 20/100 at one month and 20/200 at final follow-up. In this group the median change in foveal thickness was -68.00 at 1 month and -33 at final follow-up. In the group with no previous history of treatment for AMD (N=12) the median visual acuity was 20/100 at baseline, 20/74 at 1 month and 20/169 at final follow-up. The median change in foveal thickness was -73.00 at 1 month and -94.00 at final follow-up.

CONCLUSION

The use of intravitreal bevacizumab seems to result in improvement in visual acuity at 1 month with some decline in visual acuity over a longer follow-up period. There appears to be a significant decrease in foveal thickness during the follow-up period in all eyes.