

Time to Recurrence of AMD-related CNV Leakage after a Single Initial Intravitreal Injection Bevacizumab (Avastin®): Implications for a Retreatment

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PURPOSE

To evaluate the time to recurrent leakage on optical coherence tomography after a single initial intravitreal injection of bevacizumab (Avastin) for CNV in AMD.

METHODS

This is a retrospective chart review of 81 patients (82 eyes) injected with bevacizumab beginning in August 2005 with at least 3 months of follow-up after initial injection. The eyes were categorized as to lesion type: CNV including classic and occult (53%); CNV with a glial disciform component > 50% (21%); CNV with blood more than 50% of lesion (19%); pigment epithelial detachment (PED) (4%); and retinal angiomatous proliferation (RAP) (3%). Fluorescein angiograms were used to make the initial diagnostic classification, but seldom used thereafter, as OCT (> 50 μ increase) and visual loss (one line Snellen) was the factors used to determine recurrent leakage and retreatment eligibility.

RESULTS

Twenty-six eyes (30%) had improvement in retinal thickness and visual acuity, but subsequently developed recurrent vision loss or increase in retinal thickness on OCT. The average age of the patients was 79 years (range 62-92) and 62% were women. The average number of days to recurrence based on an OCT showing increase of sub-retinal fluid, sub-retinal pigment epithelial fluid or an increase in overlying cystoid macular edema for all lesion types was 78 days +27. Symptomatic decreases in vision or scheduled visits at 4-6 week intervals were the two reasons for re-evaluation. The remaining non-retreated eyes were almost evenly distributed for eyes (34%) with improved vision (no retreatment) and eyes (36%) with no response (no retreatment). The maintenance of good in eyes requiring no retreatment was 129 days (range 92-224). Eyes with initial positive response almost, always responded to a second injection, though some developed progressive retinal thinning with associated visual loss.

CONCLUSION

The knowledge of the beneficial effect of bevacizumab in CNV-AMD is recent and incomplete. From this uncontrolled, non-randomized, retrospective clinical observation, the drug appears to significantly improve AMD in over 64% of compromised eyes. CNV recurrences near the 2-month post-injection time indicate a repeat injection then would be beneficial by reducing the risk of monthly injections.

* Financial interest disclosed