

Combined Photodynamic Therapy with Verteporfin and Intravitreal Bevacizumab for Subfoveal Choroidal Neovascularization in AMD

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PURPOSE

To determine the safety and efficacy of combined intravitreal Bevacizumab (Avastin) with photodynamic therapy (PDT) with verteporfin for the treatment of choroidal neovascularization caused by age related macular degeneration.

METHODS

Patients with CNV secondary to AMD who received an intravitreal injection of 1.25 mg bevacizumab followed by a treatment of PDT within 1 week of the injection and who had follow-up of at least 3 months were retrospectively analyzed. Eyes with other causes of CNV and eyes that underwent ocular surgery after the commencement of treatment were excluded. Gains or loss of lines on Snellen visual acuity is used as the primary endpoint and need for retreatment based on angiographic leakage along with adverse events were secondary endpoints.

RESULTS

43 patients and 47 eyes (27, 62.7% women, 16, 37.2% men) were included in this IRB approved retrospective study. Baseline vision ranged from CF@1' to 20/40. Mean follow-up for patients was 4 +/- .94 months with a range from 3 to 6 months. The majority of eyes, 31 (87.2%) did not gain or lose more than 3 lines of snellen visual acuity. Only 2 (4.2%) of eyes lost more than 3 lines of visual acuity and 4 (8.5%) gained 3 lines or more of vision. In these patients, 9 (19.1%) of eyes lost 1 or more lines of vision, while 17 (36.2%) eyes gained 1 or more lines of vision. 21 (44.6%) of eyes had no change in vision. Based on angiographic or OCT evidence of persistent leakage or activity, only 2 (4.2%) of eyes required retreatment. No patients developed any evidence of intraocular inflammation, elevated intraocular pressure or dramatic loss of vision within 1 week of treatment. Small macular hemorrhages were noted in 3 (6.4%) of eyes after PDT.

CONCLUSION

The combination of intravitreal Bevacizumab followed 1 week by Verteporfrin PDT seems to be a safe and effective treatment alternative for patients who have exudative AMD. The low incidence of retreatment, supports the hypothesis that the PDT in combination with a pan-VEGF-A splice variant inhibitor can prolong the therapeutic interval as compared with the use of these agents alone.

* Financial interest disclosed