

Intravitreal Bevacizumab (Avastin) Enhanced Pegaptanib (Macugen) Therapy for Choroidal Neovascularization in AMD: An Avastin Booster

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PURPOSE

The study purpose is to determine if bevacizumab combined with pegaptanib can harness the rapid effects of bevacizumab while capitalizing on pegaptanib's exceptional safety profile and vision maintaining ability. Adding a pan VEGF-A splice variant inhibitor to chronic therapy with a selective VEGF-165 inhibitor can potentially enhance efficacy and diminish long term safety concerns.

METHODS

Patients with CNV secondary to AMD who have received one intravitreal injection of 0.3 mg pegaptanib followed 2 to 3 weeks by one intravitreal injection of 1.25 mg bevacizumab and at least 2 subsequent pegaptanib injections were retrospectively analyzed. These patients may have received other previous treatments prior to commencement of combination therapy. Gains or loss of lines on Snellen acuity between vision prior to bevacizumab injection and vision prior to the third pegaptanib injection was used as primary endpoint.

RESULTS

26 patients and 26 eyes (14, 53.8% women, 12, 46.2% men) were included in this IRB approved retrospective study. Mean age of these patients was 77.3 years of age. Baseline vision ranged from CF@5' to 20/40. The majority of eyes, 16 (61.5%) did not gain or lose more than 3 lines of snellen visual acuity. Only 1 (3.8%) of eyes lost 3 lines or more of visual acuity and 9 (34.6%) gained 3 lines or more of vision. A majority of patients, 18 (69.2%) eyes, gained 1 or more lines of vision, while 3 (11.5%) eyes lost 1 or more lines of vision. 5 (19.2%) of eyes had no change in vision. Patients who received OCT before injection and at the follow-up time point demonstrated consistent resolution of sub retinal fluid that remained resolved after subsequent pegaptanib injections. Ocular irritation in 3 patients after bevacizumab injection was reported as the only adverse event.

CONCLUSION

The combination of intravitreal bevacizumab as a booster treatment for chronic pegaptanib therapy appears to provide visual improvement in this small cohort of patients. In this short time frame, pegaptanib was able to maintain visual gains that resulted from the combination therapy. These results warrant further investigation into this potentially beneficial combination therapy.

* Financial interest disclosed