

Combination Therapy for Wet Age-related Macular Degeneration Using Verteporfin Photodynamic Therapy and Intravitreal Bevacizumab

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PURPOSE

Evaluate the short term safety and efficacy of combined use of intraocular bevacizumab and photodynamic therapy (PDT) with verteporfin in patients with Age-related macular degeneration (ARMD).

METHODS

A prospective, non-randomized case series in which patients with diagnosis of neovascular ARMD were treated with PDT using the standard protocol followed by 2.5 mg of intravitreal bevacizumab injection 5-7 days later. Complete ophthalmologic evaluation was performed in all patients, including best-corrected visual acuity (BCVA), slit lamp biomicroscopy, ocular fundus examination, fluorescein angiography (FA) and optical coherence tomography (OCT) prior to and 1, 4, and 12 weeks post treatment.

RESULTS

22 eyes of 22 patients were included. The median age was 75.5 years old (range 63-90), with an average BCVA of 0.8 logMAR (range 0.18-1.0) at presentation. Median retinal thickness was 365 μ (range 157-684). By the 12th week the mean BCVA was 0.4 (range 0.1-1) and median retinal thickness was 222 microns (range 108-760). Statistically significant differences were found in visual acuity and retinal thickness before and after treatment ($p < 0.029$ and $p < 0.01$, Wilcoxon rank test). 6 patients received a second intravitreal injection of bevacizumab due to reactivation of the choroidal neovascularization 4 weeks after the first injection. No complications were found from the PDT or the intravitreal injection.

CONCLUSION

Our results suggest that combined intravitreal bevacizumab with photodynamic therapy is well tolerated and is associated with improved VA and decreased retinal thickness by OCT. Further controlled and long term evaluation of combined PDT and intravitreal bevacizumab for the treatment of neovascular ARMD is warranted.