

Comparison Between Intravitreal Triamcinolone and Bevacizumab for Serous PED and Occult Choroidal Neovascularization Secondary to AMD

David Hauser, MD (Kefar Bilu B, Israel), Yoel Greenvald, MD (Rehovot, Israel), Amir Bukelman, MD (Rehovot, Israel), Haya Katz, MD (Rehovot, Israel), Reut Parnes, MD (Rehovot, Israel), Nir Shoham, (Rehovot, Israel), Genady Landa, MD (Rehovot, Israel), Ayala Pollack, MD (Rehovot, Israel)

PURPOSE

To compare the outcome of intravitreal triamcinolone (Kenalog) and intravitreal bevacizumab (Avastin) for eyes with serous PED and occult choroidal neovascularization (SPED) secondary to age-related macular degeneration (AMD).

METHODS

We compared the results of two open-label, prospective uncontrolled interventional series exclusive to patients with SPED. The first group of 15 patients (series A), were enrolled between 03/2003-07/2005 and treated with 1-3 intravitreal triamcinolone injections. Second group of 9 patients (series B), was enrolled from 10/2005 and treated with 1-2 intravitreal injections of bevacizumab. Both groups of patients with similar demographic and basic clinical characteristics, underwent EDTRS visual acuity assessment, tonometry, ophthalmic examination on each follow-up visit, and periodic fluorescein angiography.

RESULTS

Series A: 15 patients were treated with 19 triamcinolone injections. Follow-up averaged 10 months (range 3-19). Mean loss of best-corrected visual acuity (BCVA) was 5.6 ETDRS letters. Two patients (13%) improved more than 5 letters. Six (40%) showed complete resolution of the SPED. Partial resolution was observed in 5 cases (33%), and no improvement in 4 patients (27%). In 5 of 13 phakic patients (38%), progression of cataract was observed. Anti-glaucoma therapy was initiated in four patients (27%). One patient developed RPE tear and massive vitreous hemorrhage. Series B: 9 patients were treated with 13 bevacizumab injections. Follow-up averaged three months (range 2-5). Mean gain in BCVA was 4.7 ETDRS letters. Six patients (67%) improved more than five letters. Two patients (22%) showed complete resolution of the SPED. In the other 7 patients (78%) partial resolution of the SPED was noted. None of the patients developed cataract or elevated IOP.

CONCLUSION

Efficacy of both intravitreal triamcinolone and bevacizumab for eyes with SPED seems to be comparable in respect to the anatomical result. With a shorter follow-up time, the bevacizumab treatment arm showed better BCVA. Cataract progression and IOP elevations further increase the morbidity associated with triamcinolone treatment. Follow-up is ongoing, and longer term results will be presented.