

Effect on High Contrast Discriminated Target Central Fields of Photodynamic Therapy with Vertporphyrin for CNVM Due to AMD

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PURPOSE

Vision outcomes for treatment of AMD CNVM have been previously evaluated using visual acuity with severe limitations. Central visual field testing with discriminated targets appears to offer significant advantages.

METHODS

In this cohort, 31 eyes of 29 patients undergoing PDT with intravitreal triamcinolone for AMD CNVM underwent IVFA, BCVA by ETDRS, and testing of central 20o visual fields with high contrast discriminated targets (MAVES interactive computer program) prior to and at 6 month intervals. Angiograms were assessed for CNVM type and were graded for amount of subretinal fluid, exudates, hemorrhage, severity of leakage and RPE atrophy. Correlations were drawn between these and visual field alterations.

RESULTS

Average duration of treatment and follow-up was 20.1 +/-7.5 months. Among 25 eyes demonstrating complete or predominant regression, improvement in ETDRS VA (≥ 3 lines) occurred in none, but loss of ≥ 3 lines occurred in 9 (avg ETDRS declined 20/52 to 20/87). MAVES central macular acuity (best acuity at intercepts ≤ 2 deg) improved ≥ 3 lines in 6 eyes w/9 losing ≥ 3 lines (avg CMA declined from 20/72 to 20/81). Global macular acuity (composite measure of all intercepts ≤ 10 deg weighted for eccentricity) improved ≥ 3 lines in 5 eyes but declined (enlargement of scotoma) in 9 eyes (avg GMA declined from 20/178 to 20/216). Discriminated target VF demonstrated shrinkage of central scotoma in 9, stabilization 11, enlargement 5. Improvement in central scotoma density noted in 8. Greatest improvement occurred following treatments with TA and PDT. Resultant scotoma size/ density was inversely related to severity and area of RPE atrophy, residual fluid/exudates/hem & area of fibrosis.

CONCLUSION

Central visual field testing with discriminated targets offers improved understanding of retinal pathology and resulting vision for eyes undergoing CNVM AMD treatment.

* Financial interest disclosed