Predictors of Visual Acuity in Macular Edema

We read the article by Pelosini et al.\(^1\) with interest. This article concludes that the volume of residual retinal tissue between the outer and inner plexiform layers predicts 80% of the visual acuity in eyes with cystoid macular edema secondary to diabetes and uveitis.

Recently, we and many other authors\(^2\)–\(^4\) reported a correlation of visual acuity with the inner segment/outer segment (IS/OS) junction integrity in eyes with diabetic macular edema. In the present study, authors have not reported analysis of standard predictive factors of visual acuity, including macular volume and integrity of outer retinal structures. Moreover, Figure 3B, which authors have shown as an example of low residual retinal tissue, shows significant outer retinal damage. We suspect the major cause for the low visual acuity in this patient was outer retinal structure damage.

The authors conclude that the residual tissue between the inner and outer plexiform layers in the central 1000 microns can predict 80% of the visual acuity. This is a surprisingly high predictive value and we wonder if the IS/OS junction and or external limiting membrane (ELM) will add to the predictive value. We hope authors can explain or analyze these structures.

Analysis of multiple factors, including central macular thickness, macular volume, residual inner nuclear layer tissue, IS/OS junction, and ELM, as predictors of visual outcome in eyes with cystoid macular edema secondary to diabetes and uveitis would be interesting.

\textit{Jay Kumar Chhablani}\n\textit{William Freeman}

Jacob’s Retina Center at Shiley Eye Center, University of California, San Diego, La Jolla, California
E-mail: freeman@eyecenter.ucsd.edu

References


Citation: \textit{Invest Ophthalmol Vis Sci.} 2011;52:9287.
doi:10.1167/iovs.11-8750