THE CLINICAL SIGNIFICANCE OF OUTER RETINAL LAYER DISRUPTION IN DIABETIC RETINOPATHY

Y. Greenwald, A. Pollack, T. Weinberg, D. Stein
Kaplan Medical Center, Rehovot, Israel

Purpose: To assess the relationship between outer retinal layer (ORL) disruption on spectral domain OCT and BCVA in diabetic retinopathy (DR).

Methods: Central macular thickness (CMT), BCVA, and ORL disruption in the central 100m of the macula were measured in 59 eyes. Subgroups: Group A, no previous macular edema; Group B, resolved macular edema; Group C, current macular edema.

Results: ORL disruption was present in 1/12, 4/14, and 27/33 eyes in Groups A, B, and C respectively (P < .001). Increased disruption of the ORL was significantly correlated with decreased BCVA (r = 0.34, P = .01) and increased CMT (r = 0.53, P < .001).

Conclusion: ORL disruption may predict reduced BCVA in DR. ORL disruption may be more prevalent in eyes with current macular edema than eyes with resolved or no previous edema.