Efficacy and Safety of Vitamin Supplements with Resveratrol in Diabetic Macular Edema: Long-Term Results of a Comparative Study

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Purpose: To investigate the adjunct efficacy and safety of vitamin supplements, including resveratrol, in patients with diabetic macular edema (DME) treated with intravitreal anti-vascular endothelial factor (anti-VEGF) agents.

Materials and methods: Participants in this prospective study were 45 patients with DME, who were treated with either intravitreal anti-VEGF injections (n=23, Group I) or with combination of intravitreal anti-VEGF injections and vitamin supplements, including resveratrol (n=22, Group II). All patients underwent visual acuity measurement, slit-lamp examination and spectral domain-optical coherence tomography (SD-OCT) at baseline and monthly after the loading phase of three-monthly anti-VEGF injections, following a PRN protocol.

Results: There was a statistically significant improvement in visual acuity in both group at month 12 compared to baseline, although the mean change in visual acuity did not differ between the two groups (p=0.183). Accordingly, there was a statistically significant decrease in central retinal thickness in both groups at month 12 compared to baseline, while the mean difference in central retinal thickness was significantly greater in the “combination” group. The mean number of intravitreal anti-VEGF injection was less in Group II (6.45±1.12 in Group II vs. 7.39±1.31 in Group I, p=0.018).

Conclusions: Vitamin supplements with resveratrol was found to be an effective adjunct to intravitreal anti-VEGF injections in patients with DME, offering better anatomic restoration with less injections at the 12-month follow-up.

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