

Timing and strategy for vitrectomy in diabetic macula edema

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Advantages:

To assess the impact of vitrectomy on Macular Sensitivity (MS) in our management of Diabetic Macular Edema, investigating possible implications of different vitreo-retinal relationships in the efficacy of our surgical treatment.

Methods:

We analysed patients with Diabetic Macular Edema thicker than 450 microns treated with 23 G pars plana vitrectomy at their first presentation. 20 eyes, untreated previously were divided in 2 groups according to different relations between the Vitreous Hyaloid and the Retinal Surface (G1: adherent; G2: detached) and other 2 independent groups according to Hba1c value (GA: 8%; GB: >8%). VH relations were evaluated through OCT3 and intraoperatively. Preoperative, 1 month post op and then quarterly evaluation of BCVA, OCT3, MP1, 20° strategy. Laser allowed if needed after 3 months employing light threshold parameters. Mean FU: 6 mos.

Effectiveness:

With a mean follow up of 6 months, BCVA improved in 91 % of cases with a mean percentage improvement (MPI) of 24 %. Macular thickness (MT) decreased in 73 % of cases with a mean decrease of 12 % of value. MS improved in 73% of cases (MPI: 36%). Foveal sensitivity improved in 68% of cases (MPI: 43%). Better trend in G1 and in GA for almost all parameters not achieving statistical significativity ($p=0,001$). Safety: No adverse effect related to the surgery was noted. Only two eyes (of the original 12 phakic) at the one-year follow up were submitted to cataract surgery.

Take Home Message:

In diabetic eyes with significant macular edema vitrectomy is advisable independently of the posterior hyaloids.