

SYMPOSIUM: DIABETIC MACULAR EDEMA

Moderators: Stephen Sinclair, Martine Mauget-Faysse, Silvia Bopp, Ferenc Kuhn

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Internal limiting membrane peeling and intravitreal triamcinolone acetonide for refractory diabetic cystoid macular edema

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Purpose:

To evaluate the efficacy of internal limiting membrane (ILM) peeling and intravitreal triamcinolone acetonide (IVT) for refractory diabetic cystoid macular edema (DCME).

Methods:

Eleven eyes of 10 patients (mean age: 64.4±9) with diffuse DCME unresponsive to laser photocoagulation, underwent vitrectomy, ICG-assisted ILM peeling and 4mg IVT injection. In five eyes at the same time cataract extraction and in bag IOL implantation were required. Visual acuity (BCVA), intraocular pressure (IOP), macular thickness, and complications were recorded.

Results:

After 3.4±0.9 months, mean BCVA improved (P=0.038) from 20/200 (range: 20/40 – 2/200) to 20/80 (range: 20/32 - 20/303), IOP did not change significantly (P=0.10); in four eyes (36.3%) IOP reached values higher than 21mmHg and was controlled by topical antiglaucomatous medication. Macular thickness decreased from 542.55±86.4m to 402.45±65.68m (P=0.0004) at the end of follow up. One month after the treatment, in one eye rhegmatogenous retinal detachment occurred complicated with a strange kind of diffuse filamentous proliferative vitreoretinopathy and necrotic retinal areas; flattening of the retina was achieved performing a second vitrectomy with silicone oil as tamponading agent. No other complications were observed.

Conclusion:

ILM peeling and IVT injection seems a relatively safe and effective procedure for treatment of refractory diabetic cystoid macular edema.

Take-home message:

Pars plana vitrectomy with internal limiting membrane peeling and triamcinolone acetonide injection achieves good anatomical and functional results in the treatment of diabetic macular edema that fails to respond to conventional laser photocoagulation.