



Microperimetry Changes After Intra-Vitreous Injection in Diabetic Macular Oedema.

Thesis

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Abstract

Purpose: To focus on morphological macular changes and their impact on the visual acuity and Retinal sensitivity that occur in diabetic macular oedema before and after intra-vitreous injections like Bevacizumab ,Ranibizumab and Triamcinolone Acetate using Microperimetry.

Methods: Sixty eyes received preservative free intravitreal injection delivered through the pars plana. Thirty eyes with intra vitreal triamcinolone acetate and the other thirty with intravitreal Anti-VEGF .The best corrected visual acuity (BCVA), foveal thickness, and the average retinal sensitivity were considered in our study.

Patients were instructed to attend for BCVA, OCT and microperimetry-1 follow-up at baseline, one and three months.

Results: At the baseline, mean macular thickness was 447.58 ± 101.49 micron, mean visual acuity was 0.34 ± 0.16 dB and Mean macular sensitivity determined with the microperimetry-1 was 8.19 ± 4.57 dB.

After the 3month follow-up, mean OCT macular thickness decreased to 272.35 ± 84.27 microns ($P < 0.001$); mean BCVA improved to 0.54 ± 0.16 dB ($P\text{-value} < 0.001$) and mean retinal sensitivity improved to 11.58 ± 3.67 dB ($P\text{-value} < 0.001$).

Conclusions: In our study, we found that macular sensitivity is probably one of the most important predictors of visual function. MP-1 microperimetry seems to be a useful tool in evaluating visual outcome after intervention in eyes affected by DME.

Keywords: Microperimetry(MP-1), Diabetic Macular Oedema, Intra-Vitreal Injection.