THE ROLE OF VITREOUS IN DIABETIC MACULAR EDEMA RESPONSE TO RANIBIZUMAB

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Purpose: To evaluate the role of the vitreous status in the management of diabetic macular edema (DME) with ranibizumab injections in a pro re nata (PRN) regimen

Methods: Prospective study of 50 consecutive DME cases with at least 6 months of treatment pause treated with monthly 0.5mg/0.05 ml intravitreal (IV) ranibizumab (RBZ) in a PRN regimen during twelve months of follow-up. Differences between two groups, vitrectomized and non-vitrectomized eyes, were analyzed. The number of IV injections needed to control DME was the primary endpoint. Functional (best corrected visual acuity, BCVA) and anatomical (central foveal thickness, CFT, assessed by SD-OCT) changes during the follow-up period, and the percentage of incomplete response or nonresponding cases were also analyzed.

Results: 46 eyes of 38 patients, 10 vitrectomized and 36 non-vitrectomized, completed the entire follow-up. There were no differences in demographics, functional or anatomical outcomes between groups (p>0.05). In both groups baseline CFT was positively correlated with CFT during follow-up at every timepoint (p<0.05) and BCVA at month 12 showed a negative correlation with the number of RBZ IV and also with CFT observed beyond month 3 of treatment (p<0.05), i.e. the anatomical response to treatment. Conclusion: Vitreous status did not show any influence in DME response to ranibizumab. A higher baseline CFT seems to be more challenging for DME control, with the need for more IV and a poorer functional outcome.