

## Abstract 138

### PREOPERATIVE DEXAMETHASONE INTRAVITREAL IMPLANT IN DIABETIC MACULAR EDEMA PATIENTS UNDERGOING PHACOEMULSIFICATION: THE CATADEx STUDY

Oral

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#### **Purpose:**

Cataract surgery in diabetic patients has been reported to increase the levels of pro-inflammation cytokines, enhancing the risk of developing diabetic macular edema (DME). As there is not standardized approach for such patients, this study aimed to assess the impact of preoperative Dex-I on functional and anatomic outcomes.

#### **Methods:**

This was a prospective, non-comparative, single-center study, conducted on consecutive DME patients in whom cataract surgery was planned. Dex-I (Ozurdex, Allergan plc., Dublin, Ireland) was administered 15±7 days before cataract surgery and follow up were until month 12 (T12). At all the study visits, each subject underwent a standard ophthalmic examination, OCT evaluation, including central retinal thickness (CRT), central subfield thickness (CST), total macular volume (TMV), and central subfield macular volume (CSV). DME was classified in sponge-like diffuse retinal thickness (SLDRT), cystoid macular edema (CME), and subfoveal neuronal detachment (SND). Retreatment was allowed with a pro re nata (PRN) protocol.

#### **Results:**

48 eyes were included; 50% were treatment naive. CRT significantly decreased from  $416.9 \pm 68.4\mu\text{m}$  at baseline to  $304.9 \pm 26.3\mu\text{m}$  at T12,  $p < 0.001$  each. TMV and CSV were significantly reduced from  $9.96 \pm 1.55\text{mm}^3$  and  $0.40 \pm 0.10\text{mm}^3$  at baseline to  $8.44 \pm 0.8\text{mm}^3$  and  $0.32 \pm 0.05\text{mm}^3$  at T12, ( $p < 0.001$  each). BCVA (Snellen equivalent) significantly improved from  $0.26 \pm 0.19$  SE at baseline to  $0.63 \pm 0.23$ ;  $0.62 \pm 0.22$ ;  $0.59 \pm 0.21$ ;  $0.50 \pm 0.21$ ;  $0.62 \pm 0.19$ ; and  $0.66 \pm 0.18$  at T1, T2, T3, T6, T9, and T12,  $p < 0.001$  each.

#### **Conclusions:**

In this study, we found that Dex-I 15 days before surgery was effective in improving anatomic and functional outcomes in preexisting DME and its worsening after uneventful cataract surgery. Dex-I in peri/pre-operative use is a valuable and safe treatment strategy in such population.