

Prophylactic Diclofenac versus Betamethasone in Preventing Postoperative Cystoid Macular Edema After Uneventful Phacoemulsification

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ABSTRACT

Purpose: To compare the effectiveness of a topical non-steroidal drug (diclofenac 0.1%) and a topical steroidal drug (betamethasone 0.1%) in preventing cystoid macular edema (CME) after phacoemulsification cataract surgery and foldable intraocular lens (IOL) implantation.

Settings: Study was done in Armed Forces Institute of Ophthalmology, Rawalpindi, Pakistan, from August 2014 to April 2015.

Methods: This randomized study comprised 60 eyes, 30 in each group. After cataract surgery, patients were randomly divided into two groups. Group A was given Diclofenac Sodium 0.1% eye drops; Group B was given 0.1% Betamethasone eye drops. Change in central macular thickness (CMT) before and 6 weeks after surgery was compared between two groups. Drug was considered effective if the CMT didn't increase more than 15 microns (μm) from baseline value, 6 weeks after cataract surgery.

Results: All the patients completed the follow up. Six weeks after surgery, mean CMT increase in Diclofenac group was 12.57 ± 4.93 microns, whereas Betamethasone group showed mean increase of 23.73 ± 12.51 microns. Efficacy of topical Diclofenac Sodium 0.1% eye drops was seen in 83.3% of cases while that of Betamethasone was seen in 26.7% of cases ($p < 0.05$).

Conclusions: 0.1% Diclofenac Sodium eye drops is more effective than 0.1% Betamethasone eye drops in reducing frequency of pseudophakic cystoid macular edema. We recommend that non-steroidal anti-inflammatory agents should be considered for routine treatment of eyes having cataract surgery. *Al-Shifa Journal of Ophthalmology 2016; 12(3), 135-141. © Al-Shifa Trust Eye Hospital, Rawalpindi.*
