

Comparison of Loteprednol etabonate Versus Ketolorac trometamol for Postoperative Pain and Inflammation after Pterygium Excision and Amniotic Membrane Graft

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Objective: To compare the efficacy of loteprednol etabonate and ketolorac trometamol after pterygium excision with amniotic membrane graft according to postoperative ocular pain and ocular surface inflammation.

Design: Prospective, randomized, intervention study

Methods: After pterygium excision and amniotic membrane graft, 25 patients (28 eyes) were randomized into 2 groups. Group-1 received topical loteprednol etabonate and group-2 received topical ketolorac trometamol, 4 times daily for 1 month then twice daily for 2 months. Patients were evaluated for ocular pain (0-6 scoring scales) and ocular surface inflammation (0-9 scoring scales) at 1 week and 1, 2, and 3 months.

Results: Mean ocular discomfort scores in group-1 and group-2 were 1.78 and 1.50 ($p=0.47$) at 1 week, 1.28 and 1.18 ($p=0.45$) at 1 month, 0.62 and 0.67 ($p=0.24$) at 2 months, 0.43 and 0.33 ($p=0.15$) at 3 months, respectively. Mean ocular surface inflammation scores in group-1 and group-2 were 1.63 and 1.25 ($p=0.20$) at 1 week, 0.43 and 0.54 ($p=0.16$) at 1 month, 0.25 and 0.11 ($p=0.18$) at 2 months, 0.06 and 0.11 ($p=0.08$) at 3 months, respectively. Group-2 had 3 cases of amniotic membrane melting (25%).

Conclusion: No significant difference between topical loteprednol etabonate and ketolorac trometamol in controlling ocular pain and ocular surface inflammation after pterygium excision and amniotic membrane graft. Amniotic membrane melting was more common in ketolorac trometamol group.