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THE USE OF PRESERVATIVE-FREE HYDROCORTISONE IN THE POSTOPERATIVE TREATMENT REGIMEN AFTER TRANS-PRK

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STUDY OBJECTIVE

> The purpose of this study was to exhibit the advantages of preservative-free hydrocortisone (Softacort®, Laboratoires Théa, Clermont-Ferrand, France) in the postoperative treatment regimen of transepithelial photorefractive keratectomy (Trans-PRK) for the promotion of epithelization and minimalization of early haze appearance.

DEMOGRAPHY

> 40 patients who had undergone trans-PRK surgery with the Schwind Amaris 1050RS.

> 24 males and 16 females.

METHODOLOGY

> A prospective, randomized controlled study.

> 40 patients who had undergone trans-PRK were divided into two equal groups, the first group received hydrocortisone (Softacort®, Laboratoires Théa, Clermont-Ferrand, France) 2 drops 4 times daily for 7 days and the control group received no complementary medication. Both groups were given: artificial tears 2 drops hourly for 7 days, then administered every 2 hours for 21 days and tapered till 3 months post-operation, antibiotic drops (quinolone) 4 times daily and autologous serum hourly for 7 days, and a bandage contact lens till complete epithelization of the surgical wound. Patients were monitored daily to determine the time of a complete epithelization and then on day 15 and 30 to assess any signs of early-onset haze and visual acuity. Scheimpflug topography and anterior segment OCT were performed on day 15 and 30 as well as IOP tonometry.

RESULTS

> The results showed a significant decrease in recovery days in patients treated with hydrocortisone compared to the control group ($p<0,0006$). Softacort® group was associated with less significant clinical presentation of postoperative haze.

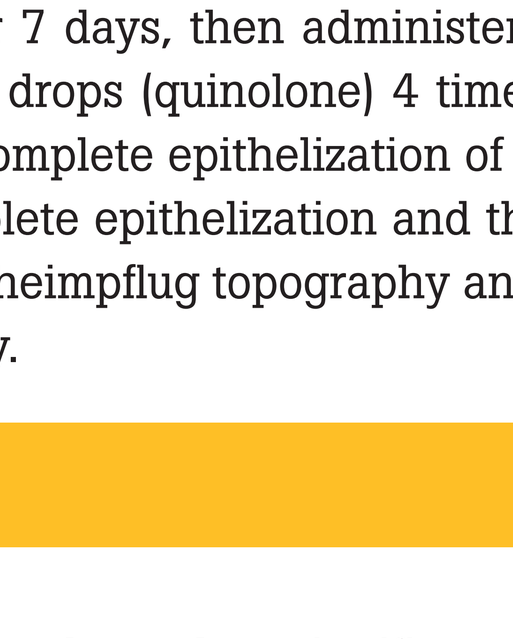

Fig 1: Days to recovery in the two groups (n=40)

> Both groups had satisfactory visual acuity and no significant differences in their IOP were observed.

Fig 2: Intra ocular pressure after 30 days in the two groups (n=37)

CONCLUSION

> The results showed a significant decrease in recovery days in patients treated with hydrocortisone compared to the control group ($p<0,0006$). Softacort® group was associated with less significant clinical presentation of postoperative haze.

ACKNOWLEDGEMENTS

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