

Effect of Intracameral Steroids Injected at the end of Phacoemulsification on Corneal endothelium and postoperative corneal edema

Khaled G. Abueleinen¹, Hossam M. Khalil², Safaa A. Aboud², Ahmed Khalifa³, Nehal. M. ElGendy¹, Abdelhameed H⁴

Cairo university, Egypt¹

Beni-Suef University, Egypt²

Police Hospitals, Egypt³

Alazhar University, Egypt⁴

Purpose: Investigating the effect of intracameral steroids at the end of phacoemulsification on corneal edema and endothelial count.

Methods: Prospective, interventional case control study. Sixty-nine eyes were randomized into 3 groups, 23 eyes each: 2 groups received intracameral dexamethasone and triamcinolone (TA) respectively, while controls didn't receive any intraoperative steroids.

Results: On the first postoperative day corneal edema was significantly higher in control compared to dexamethasone and TA groups, P-values were 0.0495 & 0.015 respectively. One month later, mean endothelial cell loss was significantly higher in control (18.37+6.7%) compared to intracameral dexamethasone and TA groups (10.77+4.34%, 8.2+6.57%, respectively, P< 0.0001 both, t-test) but was nonsignificant between intracameral TA and dexamethasone groups (P=0.1329).

The mean increase of corneal thickness was nonsignificantly higher in control (10.47+6.97%) compared to intracameral dexamethasone and TA groups (7.8+4.65% & 8.2+5% respectively), P-values were 0.14 & 0.21 respectively.

Conclusions: Intracameral steroids at the conclusion of phacoemulsification significantly improved corneal edema and spared corneal endothelium.

Biography

Khaled G Abu Eleinen is a renowned Ophthalmology Professor. Khaled G Abu Eleinen is working in Department of Ophthalmology, Faculty of Medicine, Cairo University, Cairo, Egypt and Department of Ophthalmology, Fayoum eye hospital, Fayoum, Egypt. He publishes many articles in reputed journals.