**Sutureless Wide Incision Cataract Surgery Using Viscoexpression in Brown Mature Senile Cataract**

Khaled G Abu Eleinen, Salah A Makhlouf, Hoda T EL Shiwy and Mohamed W M Nagaty

Cairo University, 2Fayoum eye hospital, Egypt

**Abstract**

**Purpose:** To assess visual acuity, surgically induced astigmatism, endothelial cell loss, operative time and complications of sutureless wide incision cataract surgery in brown mature senile cataract using viscoexpression. Settings: Tertiary care ophthalmic unit, Egypt, over the last 8 years from 2012 to January 2020. Methods: Retrospective, interventional case series that included 472 eyes in 413 patients with brown, mature senile cataract that deemed risky for phacoemulsification. Wide and long superior sclerocorneal tunnel incision with straight posterior border was constructed. After anterior capsulotomy, the nucleus was rotated into the anterior chamber (AC). The nucleus was expressed by injection of ophthalmic viscosurgical device (OVD) into the AC followed by irrigation aspiration and intraocular lens implantation. Results: Patients ages ranged from 57 to 93 years, (Mean 74.6 ± 5.3) Ten weeks after surgery, decimal visual acuity of 0.5 or better was achieved by 80.6% of cases as best corrected and by 67.6% of cases as uncorrected visual acuity. Flattening of the vertical meridian by 1 diopter or less was noted in 88.7% of eyes. Average loss of endothelial cells was 13 % (P < 0.0001 paired samples T-test) in 104 eyes that underwent specular microscopy. Average duration of the operation was 11.2 ± 3.5 minutes. Postoperative hyphema was recorded in 6 eyes (1.27%). Significant corneal edema was noted in 3 eyes (0.64%). Vitreous loss occurred in 5 eyes (1.06%). Postoperative uveitis with residual posterior synechiae developed in 4 eyes (0.85%). Early postoperative rise of tension was recorded in 10 eyes (2.1%). Decentration of IOL was recorded in 2 eyes due zonule dehiscence (0.42%) that required replacement with Ac-IOL. Conclusions: Sutureless wide incision cataract surgery (SWICS) was a safe alternative to the classic ECCE for removal of brown mature senile cataract where phacoemulsification appeared hazardous. It spared time and reduced surgically induced astigmatism related to wound suturing.

**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.

**30th International Congress on Vision Science and Eye**

August 28-29, 2020 Webinar

**Abstract Citation:**