Poster No.: EG2-166
Panel No.: 166
The changes of vernal keratoconjunctivitis
First Author: Getry SUKMAWATI

Purpose: To report the changes of vernal keratoconjunctivitis (VKC) of a 9 yo boy. Method: This is a case report of a 9 yo boy with VKC and corneal shield ulcer on the RE. VA: RE 5/7, LE 5/10, normal laboratory findings, except increased eosinophils, (DC: 0/5/166/27/1), the blood sedimentation rate of first hour is 40/mm³, negative Mantoux test. Multi Layer Amnion Membrane Transplantation (MLAMT) for the corneal ulcer and giant and hard papillae (like stone) excision of the LE superior tarsal were done. Results: Epithelialization of corneal ulcer was already detected on the third day patching after MLAMT, completed on the fifth day. Histopathology examination of the papillae showed Haemangiogendothelioma. Recurrent large papillae appeared two months after surgery. Conclusion: Although there is only one case reported, it is not impossible that VKC can be a predisposition factor for conjunctival tumor, and MLAMT can promote corneal epithelialization in 3 days.

Poster No.: EG2-167
Panel No.: 167
Dry eye in type II diabetes mellitus
First Author: May-may CHOO
Co-Author(s): K PRAKASH, Swee-seng LOH

Purpose: To assess tear function between Type II diabetics and non-diabetics and to correlate dry eyes with central corneal thickness and corneal endothelial cell counts. Method: One hundred eyes of 100 Type II diabetics and 100 eyes of controls were included in this study. Evaluation of tear function was carried out with a symptom questionnaire, tear break-up time assessment and Schirmer’s test. Results: Presence of dry eye symptoms and signs were higher in diabetics compared to controls. The positive correlation between age and dry eye signs was more pronounced in the control group (r=0.591, p<0.0001) compared to diabetics (r=0.389, p=0.0001). The presence of dry eye was weakly correlated with reduction of endothelial cell density in controls (r=-0.240, p=0.016) but not in diabetics. Conclusion: Dry eyes signs and symptoms were significantly higher in Type II diabetes mellitus patients.

Poster No.: EG2-168
Panel No.: 168
Expression of angiopoietin-like protein 2 in mice corneal neovascularization
First Author: Tomohiko USUI
Co-Author(s): Norihiko HONDA, Tatsuya MIMURA, Shiro AMANO

Purpose: Many growth factors and chemokines are involved in corneal neovascularization. However, the mechanisms of corneal neovascularization have not been fully elucidated yet. In the present study, we investigated the expression of angiopoietin like protein 2 (Angptl2) in mice corneal neovascularization models. Method: Corneal neovascularization is induced by intrastromal suture of 10-0 nylon 1 mm away from limbus. The expressions of Angptl2 are examined by real-time PCR and immunohistochemistry. Results: Compared with normal cornea, Angptl2 mRNA is significantly upregulated 1, 3, and 7 days after suturing. Angptl2 protein is not abundantly expressed in normal cornea. Otherwise, Angptl2 protein is localized in corneal epithelium and stromal cells which include infiltrating leukocytes and endothelial cells in vascularized cornea. Conclusion: Because the expression of Angptl2 is stimulated in vascularized corneas, Angptl2 may be involved in corneal neovascularization. Function of Angptl2 in corneal neovascularization should be studied in future.

Poster No.: EG2-169
Panel No.: 169
Comparison of the endothelial cell loss after phacoemulsification in penetrating keratoplasty patients and cataract patients
First Author: Man-soo KIM
Co-Author(s): Eun-chul KIM

Purpose: To evaluate the endothelial cell loss after phacoemulsification in cataract patients who underwent the penetrating keratoplasty comparing to cataract patient who have no surgical history, by age and preoperative endothelial cell, phaco parameters match study. Method: We performed phacoemulsification on 20 cataract patients who underwent penetrating keratoplasty before. We selected a age, preoperative endothelial cell, and several phaco- parameters matched cataract patients as a control group. All cataract surgery was done by one surgeon. Postoperative endothelial cell density, visual acuity, intraocular pressure, and complications was evaluated with time interval. Results: The endothelial cell loss of keratoplasty group and age-
major complications.

Poster No.: EG2-126
Panel No.: 126
Secondary anterior chamber intraocular lens
First Author: Wendy MUNTUR
Co-Author(s): Re BUDIMAN

Purpose: to report secondary anterior chamber intraocular lens implantation for aphakic patient after cataract extraction. **Method**: a 80-year-old man came to cataract unit in Cidco Eye Hospital with the chief complaint blurred vision in the left eye. Visual acuities on the right eye was 0.3 pinhole 0.5 and on the left eye was finger counting at 1 meter with S +10.00 addition 0.3. The intraocular pressure is with in normal limits. The diagnosis were psuedophakic on the right eye and aphakic on the left eye + pseudoexfoliatif syndrome on the both eyes. Cataract extraction was performed on the left eye with vitreous prolapse complication during surgery in 2007, and it decided to left the eye aphakic. One year later secondary anterior chamber intra ocular lens was implanted on the aphakic eye.

**Results**: aphakic in left eye cause vitreous prolaps.

**Conclusion**: implant anterior chamber iol in left eye.

Poster No.: EG2-127
Panel No.: 127
Effect of uncomplicated phacoemulsification cataract surgery on the corneal endothelium between diabetics and non-diabetics: pilot study
First Author: Terrence SOONG
Co-Author(s): Amir SAMSUDIN, Hasliza HASSAN, May-may CHOO, Azida WAN ABDUL KADIR, Norlina RAMLI

Purpose: To investigate whether phacoemulsification cataract surgery results in more damage to the corneal endothelium in diabetics compared to the non-diabetics. **Method**: Central corneal endothelial cell counts, coefficient of variation of cell size, and hexagonality were assessed before surgery and up to 1 month postoperatively. **Results**: Since October 2008, thirteen patients completed the trial to date. There was a reduction of 4.6% in cell count in the diabetic group (P=0.313) compared to a reduction of 3.4% in the non-diabetic group (P=0.433). In the diabetic group, there was a significant mean difference in hexagonality postoperatively (-11.2±4.2%; P<0.05) compared to the non-diabetic group (-10.5±11.4%; P=0.074). There was no significant difference in the coefficient of variation of cell size between both groups postoperatively (Diabetics 10.2±14.3%, P=0.110; Non-diabetics 9.3±10.2%, P=0.075). **Conclusion**: From this pilot study, no significant difference in overall corneal endothelial cell loss was found between these 2 groups of patient. A larger study is currently being conducted.

Poster No.: EG2-128
Panel No.: 128
Management of incorrect intraocular lens power with intra ocular lens exchange
First Author: Rathi MUTIA
Co-Author(s): Re BUDIMAN

Purpose: To report management of incorrect IOL power with IOL exchange. **Method**: A forty years old man came to Cidco Eye Hospital with chief complain gradually decrease vision in left eye 6 months earlier. Visual acuity on the right eye was 0.3 and left eye was 1/300. Slit lamp examination on both eyes: pterygium grade II/T2, KP's, iris pigment on endothel. Lens was subcapsular posterior cataract on the right eye, and mature cataract on the left eye. Left eye USG within normal limits, axial length 22.36 mm. Keratometry and biometry result with axial length taken from USG, showed IOL power 24.0D. Cataract extraction on the left eye was done. **Results**: Three months after surgery, visual acuity was 1/60 ph 0.1. The latest keratometry and biometry showed axial length 25.01 mm with IOL power 15.0 D. Then IOL exchange is done. **Conclusion**: Careful preparation and postoperative evaluation is needed to achieve successful cataract extraction.

Poster No.: EG2-129
Panel No.: 129
Comparison of intraocular lens power calculation by IOLMaster in phakic and eyes with hydrophobic acrylic lenses
First Author: Shu-wen CHANG
Co-Author(s): Chin-yen YU, Daniel CHEN

Purpose: To compare IOL power estimation using IOLMaster in phakic and pseudophakic eyes. **Method**: IOLMaster measurements were performed on 226 eyes of 156 patients before phacoemulsification (IOLM-1) and 3 months postoperatively (IOLM-2). The expected refraction (ER) and estimation error (EE) calculated from IOLM-1 using the SRK II, SRK/T and Haigis formulae were compared to the residual refraction 3 months postoperatively. The difference in