REFR@CTIVE.ON-LINE & SICSSO

XIII Congresso Nazionale Refr@ctive.on-line - XII Congresso Nazionale SICSSO

Siena, Italy, 27-29 June 2013

FINAL PROGRAM and ABSTRACTS

3rd JOINT INTERNATIONAL CONGRESS

CONGRESS CHAIRMEN

Vincenzo Sarnicola, MD - **Paolo Vinciguerra**, MD

Corneal wound healing is a complex dynamic process in which cells, extracellular matrix, tears and growth factors interact to restore tissue integrity while maintaining clarity and hydratation. Many mechanisms are involved in the corneal wound healing process, including adhesion, migration and proliferation of corneal epithelial cells. These three phases are characterized by an intense methabolic cellular activity and need high energy.
The aim of our work is to assess the possible role of conzyme Q10 on the the wound healing response in laboratory experiments and if it may be of help in controlling wound healing in corneas that have suffered epithelial damage or have undergone oxidative stress.

FELICE MENICACCI

CORRECTION OF SECONDARY AMETROPIA POST PENETRATING KERATOPLASTY AND DEEP ANTERIOR LAMELLAR KERATOPLASTY

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PURPOSE: Astigmatism and myopic ametropia is still a severe problem in 8% to 20% of the eyes that cannot be corrected by spectacles or contacts lenses. The purpose of this paper is to evaluate the efficacy of femtolaser i-lasik for the correction of secondary ametropia induced by previous corneal surgery (PKP and DALK) in cases with anisometropia.
METHODS: Patients with secondary ametropia (ametropia and difficult correction through contacts lens or spectacles) following PKP and DALK have undergone femtolaser I lasik. Procedure lasik has been performed using AMO's IntraLaser FS and for the refractive defect correction laser Bausch & Lomb 217 Zyoptix Z 100 Hz e laser VISX S4 –IR.
RESULTS: The results we archieved, document and confirm the validity of lasik for the correction of such post operative refractive errors. We obtained a clear improvement of both the anisometropia and visual acuity.
CONCLUSIONS : Refractive surgery can improve the final visual outcome of patients who have undergone successful corneal transplantation. Among different techniques used for residual refractive errors (astigmatism, myopic or hyperopia) we believe that femtoLasik, in selected cases, should be considered a valid technique to be used.

FELICE MENICACCI

CORRECTION OF REFRACTIVE DEFECTS WITH FEMTOLASIK – SBK : STABILITY, EFFICACY ANDSAFETY

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PURPOSE: To evaluate the efficacy of femtolaser SBK for correction of all refractive defects : myopia., astigmatism and hyperopia.
METHODS: Patients with myopia, astigmatism, hyperopia underwent femtoLasik-SBK . The procedure femtoLasik has been performed with AMO's IntraLaser FS and refractive defect was treated using Bausch & Lomb 217 Zyoptix Z 100 Hz e laser VISX S4 –IR.
RESULTS: Our results document the reliability, the stability, the efficacy and the safety of the femtoLasik –SBK technique for the correction of these defects performing a 90 micron flap. This type of flap saves tissue and Bowman membrane, reduces the effect on the corneal stability, and reduces the " dry eye syndrome" due to the involvement of nerve plexus stromal and subepithelial, and furthermore reduces the risk for corneal ectasia.
CONCLUSIONS: Among different techniques used for residual refractive defects the femtoLasik-SBK has been recognized a valid alternative to the PRK and the LasiK with microcheratome.

CHIARA MILLACCI

DALK FOR KERATOGLOBUS: MANAGEMENT OF DISPARITY BETWEEN DONOR-RECIPIENT

Authors: **C. Millacci, P. Toro, E. Sarnicola, C. Sarnicola, V. Sarnicola**
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PURPOSE:To report a predescemetic Deep Anterior Lamellar Keratoplasty (pdDALK) approach in keratoglobus managing donor-recipient curvature disparity.
METHODS:A layer by layer stromectomy to reach a pdDALK plane was performed in 3 eyes of 2 patients with extreme keratoglobus. Average of preoperative corneal thickness was 220 microns. Diameter of trephination was 11mm. Disparity of curvature between donor-recipient was managed performing a full thickness circular cut of the recipient bed. Removed tissue was stored. Descemet and endothelium were pulled out from donor graft and the stored tissue (recipient's endothelium) was attached to the donor button using fibrin glue. Same size (11 mm) donor tissue was sutured with 18 Nylon 10-0 interrupted stitches. Air bubble in the anterior chamber was left at the end of the surgery.
RESULTS:Rupture of recipient bed occurred during surgery in one case. In all cases the recipient's endothelium glued to the donor button resulted attached at first day postoperative. In one eye after one week postop dettachement of recipient's endothelium was recorded. A new air bubble into the anterior chamber was used to fix this complication. Cornea and ocular surface were stable until the last follow-up. No other problems of aderence between donor-recipient were recorded.
30% of endothelial cell loss was present at 6 months follow-up.
CONCLUSIONS: Full thickness complete circular cut of the recipient bed seems to be a good approach to solve disparity of curvature problems between donor and recipient bed in DALK for keratoglobus.

CHIARA MILLACCI

AMNIOTIC MEMBRANE TRANSPLANTATION IN TRABECULECTOMY

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PURPOSE: To determinate the efficacy and safety of the use of