

2009 Research Days Abstract Form – Department of Ophthalmology – UNIFESP/EPM

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED):

Review the Scientific Section Descriptions. Select and enter the two-letter Code for the one (1) Section best suited to review your abstract.

3. PRESENTATION PREFERENCE (REQUIRED) Check one:

- Paper
- Poster
- FAST Paper

4. The signature of the First (Presenting) Author (REQUIRED) acting as the authorized agent for all authors, hereby certifies that any research reported was conducted in compliance with the Declaration of Helsinki and the 'UNIFESP Ethical Committee'

Jarbas Pereira de
macado

Scientific Section Descriptions (two-letter code):

- (BE) OCULAR BIOENGINEERING
- (CO) CORNEA AND EXTERNAL DISEASE**
- (CA) CATARACT
- (EF) ELECTROPHYSIOLOGY
- (EP) EPIDEMIOLOGY
- (EX) EXPERIMENTAL SURGERY
- (GL) GLAUCOMA
- (LA) LABORATORY
- (LS) LACRIMAL SYSTEM
- (LV) LOW VISION
- (NO) NEURO-OPHTHALMOLOGY
- (OR) ORBIT
- (PL) OCULAR PLASTIC SURGERY
- (PH) PHARMACOLOGY
- (RE) RETINA AND VITREOUS
- (RS) REFRACTIVE SURGERY
- (RX) REFRACTION-CONTACT LENSES
- (ST) STRABISMUS
- (TR) TRAUMA
- (TU) TUMORS AND PATHOLOGY
- (UV) UVEITIS
- (US) OCULAR ULTRASOUND

Deadline: Oct 12, 2009

FORMAT:
Abstract should contain:
Title
Author, Co-authors (maximum 6),
Purpose, Methods, Results,
Conclusion.

Poster guidelines:
ARVO Abstract Book (1.10 x 1.70m)

17. FIRST (PRESENTING) AUTHOR (REQUIRED):

Must be the author listed first in abstract body.

- () R1 () R2 () R3 () PIBIC
- () PG0 (x) PG1 () Fellow () Technician

Last Name: Macedo

First Name: Jarbas

Middle: Pereira

Service (Sector): CO CORNEA AND EXTERNAL DISEASE

CEP Number: 1108/09

TITLE: COMPARISON BETWEEN MANUAL DEEP ANTERIOR LAMELLAR KERATOPLASTY AND THE AUTOMATED TECHNIQUE WITH FEMTOSECOND LASER ASSOCIATED WITH PHOTOTHERAPEUTIC KERATECTOMY BY EXCIMER LASER IN KERATOCONUS

Author and Co-authors: JARBAS Pereira de Macedo; LUCIENE Barbosa de Sousa; CAMILE Tonin; VIVIAN Sakai; PEDRO Bertino Moreira.

Purpose: to compare the efficacy of manual deep anterior lamellar keratoplasty with the automated technique with femtosecond laser associated with phototherapeutic keratectomy by excimer laser in patients with keratoconus.

Methods: randomized, controlled, prospective study of 48 patients with keratoconus submitted to deep anterior lamellar keratoplasty (DALK), divided into 3 groups. Group 1: DALK by femtosecond laser associated with phototherapeutic keratectomy by excimer laser; group 2: DALK by femtosecond laser associated with air dissection technique; group 3: DALK by air dissection technique. In the post operative, patients will be evaluated by best spectacle corrected visual acuity, confocal microscopy and anterior segment optical coherence tomography (OCT Visante™).

Results: best spectacle corrected visual acuity in the third postoperative month in group 1 and 2 were 0,85 logMAR and 0,3 logMAR, respectively. Confocal microscopy in both groups showed normal epithelial layer, hiperreflectivity in keratocytes and endothelial cells without abnormalities. In group 2, confocal microscopy showed irregularity in the interface. Residual stromal pachymetry of group 1 and 2 by OCT Visante™ were, respectively, 218,6 µm (varying from 154,8 to 303,6 µm) and 59,4 µm (varying from 46,7 to 72,5 µm).

Conclusion: initial results suggest that DALK by femtosecond laser associated with air dissection technique is more efficient than DALK by femtosecond laser associated with phototherapeutic keratectomy by excimer laser.

Key words: lamellar keratoplasty; keratoconus; femtosecond laser; excimer laser; visual acuity.