

2007 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 (RS)

3. PRESENTATION PREFERENCE (REQUIRED)
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"

Signature of First

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

Deadline: 29/10/2007

FORMAT:
Abstract should contain:
Title, Name of Authors, Name of other authors (maximum 6), Purpose, Methods, Results, Conclusions.
Example: ARVO (1.10 x 1.70)
Abstract Book

1. FIRST (PRESENTING) AUTHOR (REQUIRED)
Must be author listed first in body of abstract
() R1 () R2 () R3
() PG0 (X) PG1 () Estagiário () Tecnólogo () PIBIC

Wallau Anelise Dutra
Last Name First Name Middle

Refractive Surgery (RS) 01449/04
Service (sector) Nº CEP
(Comitê de Ética em
Pesquisa da Universidade
Federal de São Paulo-
UNIFESP)

PRK with Mitomycin C versus LASIK in Custom Surgeries for Myopia: One Year Follow-up

Authors: Anelise Dutra Wallau and Mauro Campos

Purpose: To compare photorefractive keratectomy with prophylactic use of mitomycin C (MMC -PRK) and laser in situ keratomileusis (LASIK) in custom surgeries for myopic astigmatism

Methods: Eighty -eight eyes of 44 patients with a minimum estimated ablation depth of 50 µm were randomized to PRK with MMC 0.002% for one minute in one eye and LASIK in the fellow eye. Uncorrected visual acuity (UCVA), best - spectacle-corrected visual acuity (BSCVA), cycloplegic refraction, biomicroscopy, contrast sensitivity, specular microsc opy, aberrometry, biomechanical properties of the cornea and a subjective questionnaire were evaluated. Forty -two patients completed one year followup.

Results: Mean spherical equivalent (SE) error before surgery and mean ablation depth (AD) were -3.99 ± 1.20 diopters (D) and 73.09 ± 14.55 µm in LASIK and -3.85 ± 1.12 D and 70.7 ± 14.07 µm in MMC -PRK eyes. UCVA was significantly better in MMC -PRK eyes 3 (p=0.04), 6 (p=0.01) and 12 (p=0.03) months after surgery. BSCVA was also better in MMC -PRK eyes (p<0.001) at one year follow-up. SE did not differ significantly in the 2 groups during follow -up (p>0.05). Significant haze was not observed in any PRK eye . The mean higher-order aberrations (HOA) was higher in LASIK eyes postoperatively when compared with MMC-PRK eyes (p=0.01). MMC -PRK eyes showed better contrast sensitivity than LASIK eyes (p<0.05). The endothelial cell count did not differ significantly in the 2 groups (p=0.65). Corneal hysteresis and corneal resistance factor were significantly greater in LASIK eyes one year after surgery. MMC -PRK eyes were better rated in terms of visual satisfaction

Conclusions: MMC -PRK appears to be more effective than LASIK in custom surgeries for moderate myopia. Long-term follow-up is necessary to attest its safety.