2007 Research Days Abstract Form – Department of Ophthalmology – UNIFESP/EPM

2. SCIENTIFIC SECTION PREFEREN CE (REQUIRED): Review the Scientific section Descriptions. Select and enter the two -letter Code for the one (1) Section best sullied to review your abstract
(GL)

3. PRESENTATION PREFERENCE (REQUIRED) Check one (1)
(a) Paper
(b) Poster

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 Heisinki and t he 'UNIFESP Ethical Committee"

Signature of First

Scientific Section Descriptions

(OR) ORBIT
(PL) OCULAR PLASTIC SURGERY
(RE) RETINA / VITREOUS
(RX) REFRACTION-CONTACT LENSES
(NO) NEURO-OPHTHALMOLOGY
(TU) TUMORS AND PATHOLOGY
(ST) STRABISMUS
(UV) UVEITIS
(LS) LACRIMAL SYSTEM
(LV) LOW VISION
(CO) CORNEA / EXTERNAL DISEASE
(GL) GLAUCOMA
(RS) REFRACTIVE SURGERY
(CA) CATARACT
(US) OCULAR ULTRASOUND
(TR) TRAUMA
(LA) LABORATORY
(BE) OCULAR BIOENGINEERING
(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 1.7 0) Abstract Book

1. FIRST (PRESENTING) AUTHOR (REQUIRED)
Must be author listed first in body of abstract

(X) R1 ( ) R2 ( ) R3
( ) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( ) PIBIC

Biteli_____Luis_____Gustavo_____
Last Name First Middle

Glaucoma_____ 1114/06_____
Service (sector) Nº CEP

5. ABSTRACT (REQUIRED)

Influence of intraocular pressure reduction on corneal hysteresis

L. G. Biteli, T.S. Prata, F. P. Magalhães, L. A. S. Melo Jr., L. M. Guedes

Purpose: To assess the influence of the intraocular pressure reductio n on the corneal hysteresis.

Methods: A total of 22 glaucoma patients (37 eyes) were enrolled in this prospective study. Patients were included if they had glaucoma without previous ocular surgery, intraocular pressure higher than 20 mmHg, and no other s ignificant ocular disease. The intraocular pressure was measured using Goldmann applanation tonometer and the corneal hysteresis was obtained using the Ocular Response Analyzer. These measurements were taken before and one hour after the use of antiglaucoma medications (brimonidine tartrate 0.2%, timolol maleate 0.5%, travoprost 0.004%, and acetazolamide 500 mg).

Results: Before medication, the mean (SD) intraocular pressure and corneal hysteresis were 29.6 (6.8) mmHg and 7.0 (2.4) mmHg, respectively. After medication, the mean (SD) intraocular pressure reduced to 18.5 (5.7) mmHg (P <0.001) and the corneal hysteresis increased to 8.2 (2.3) mmHg ($P < 0.001$). There was no statistically significant correlation between both intraocular pressure and corneal hysteresis changes ($r = -0.12$; $P = 0.74$).

Conclusions: Corneal hysteresis increased after intraocular pressure reduction, but without correlation between these changes. This lack of correlation suggests that other factors are related to the increase in the corneal hysteresis, which need to be investigated.