

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  
**(G)**

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 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  
**(G) 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 1.70)  
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  
  
Prata Tiago Santos  
Last Name First Name Middle  
  
Glaucoma 1114/06  
Service (sector) Nº CEP

5. ABSTRACT (REQUIRED)  
**Factors Associated with Topographic Changes of the Optic Nerve Head after Intraocular Pressure Reduction in Glaucomatous Patients- Initial Results**  
*Ophthalmology Department, Federal University of São Paulo, São Paulo, Brazil.*  
T.S. Prata, V. C Lima, L. M. Guedes, L. G. Biteli, F. P. Magalhães, A. Paranhos Jr.

**Purpose:** To evaluate which factors, mainly diabetes and corneal hysteresis, could be correlated with topographic changes of the optic nerve head (ONH) after intraocular pressure (IOP) reduction in glaucomatous patients. **Methods:** Patients referred to the glaucoma clinic that presented documented IOP of over 21 mmHg and cup to disk ratio greater than 0.5 were included in the study. All subjects underwent a complete ophthalmic evaluation and those presenting any other significant ocular disease or ocular surgery were excluded. Central corneal thickness was measured using ultrasound pachymetry. Goldmann applanation tonometry, corneal hysteresis evaluation (by the Ocular Response Analyzer) and scanning laser ophthalmoscopy were performed before and after lowering IOP with topical brimonidine tartrate 0.2%, timolol maleate 0.5% plus travoprost 0.004%, and oral acetazolamide 500 mg. It was analyzed the changes in the ONH parameters in both diabetic and non diabetic patients, and its correlation with corneal hysteresis. **Results:** A total of 21 non diabetic patients (21 eyes) and 5 diabetic patients (5 eyes) were included in the study. Mean age (standard deviation [SD]) for the diabetic and non diabetic groups were respectively 74.0 (4.7) and 67.8 (13.8) years old. Mean (SD) IOP delta was similar for both groups: 50.5% (6.8) for the diabetic and 48.1% (15.4) for the non diabetic subjects (P=0.6). There was a tendency for a statistically significant difference between the 2 groups concerning cup area (P=0.058) and rim area delta (P=0.074), and also for a positive correlation between maximum cup depth delta and corneal hysteresis. **Conclusions:** These initial results revealed that could exist significant differences in topographic changes of the ONH after IOP reduction between glaucomatous patients with and without diabetes. This possible correlation deserves further analysis with a larger number of subjects to be confirmed.