

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
EF

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
 (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 1.70) Abstract Book

1. FIRST (PRESENTING) AUTHOR (REQUIRED)
 Must be author listed first in body of abstract
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(X) PG0 () PG1 () Estagiário () Tecnólogo () PIBIC
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5. ABSTRACT (REQUIRED)
Functional Assessment in Glaucoma Suspect and Glaucomatous Eyes: A Comparison of mfVEP, FDT and SWAP
Purpose: To compare subjective and objective tests of visual function at different stages of glaucoma. **Methods:** Seventy-two subjects enrolled in a prospective study were evaluated with frequency doubling technology perimetry (FDT), short-wavelength automated perimetry (SWAP), and the multifocal visual evoked potential (mfVEP) technique. The subjects were placed in the following groups based upon the results of standard achromatic perimetry (SAP): 22 eyes were classified as glaucoma suspect (GS) (normal glaucoma hemifield test (GHT) and mean deviation (MD)), 21 eyes as early glaucoma (MD < -6 dB), and 13 as moderate glaucoma (MD > -6 dB). Eyes with early or moderate glaucoma had glaucomatous optic neuropathy and abnormal GHTs and MDs on SAP. FDT was performed with the Humphrey Matrix (24 -2 program), SAP with the Humphrey Field Analyzer II (24 -2 program), and mfVEPs with the VERIS system using a 60 sector pattern -reversal dartboard array. SWAP and FDT fields were classified as abnormal when the GHT was outside normal limits and there were 3 or more contiguous points in a hemifield of the pattern deviation plot with p<0.05. The mfVEP was considered abnormal when the interocular or monocular probability plot had 3 or more contiguous points in a hemifield with p<0.05 and at least one of these points had p<0.01. **Results:** In the GS group, SWAP, FDT and mfVEP tests revealed visual field abnormalities in 18%, 36% and 59% of eyes, respectively. In early glaucoma, abnormalities were noted in 70% (SWAP), 81% (FDT) and 67% (mfVEP). In moderate glaucoma, abnormalities were noted in 100% (SWAP), 100% (FDT) and 92% (mfVEP). The specificity was greater in SWAP (89%) than in FDT (75%) and mfVEP (80%).
Conclusions: In view of the differences in detection of functional deficits between the subjective and objective tests, we suggest that a combination of one subjective (FDT or SWAP) and one objective (mfVEP) test be used for follow-up and early detection of glaucoma.