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

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED): GL

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"

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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)

26. FIRST (PRESENTING) AUTHOR (REQUIRED):
Must be the author listed first in abstract body.

( ) R1 ( ) R2 ( ) R3 ( ) PIBIC
(X) PG0 ( ) PG1 ( ) Fellow ( ) Technician

Last Name: Castro
First Name: Dinorah
Middle: Piacentini Engel

Service (Sector): Glaucoma

CEP Number:

5. ABSTRACT (REQUIRED):

Title **Comparison of macular optical coherence tomography measurements to detect glaucoma**

Author and Co-authors: Castro DPE; Castro LC; Mattox C

Purpose: To compare glaucoma detection ability of macular measurements among 3 spectral domain-OCT devices and one Time Domain –OCT.
Methods: Cross-sectional study. 191 glaucoma, 127 glaucoma suspects and 58 healthy eyes were scanned with RTVue ganglion cell complex (GCC) scan, Cirrus full macular thickness, Stratus full macular thickness, and Topcon macular nerve fiber layer scan. Area under receiving operato rcurves (AUC) with specificity fixed at 80% were compared.
Results: In the group of glaucoma eyes with no defect on visual field, the ability to discriminate glaucoma from normal eyes of the GCC analysis [RTVue –OCT (AUC=0.9995)] was better than the full macular thickness [Stratus (AUC=0.5954; p<0.0001) and Cirrus (AUC=0.5751; p<0.0001) and slightly better but not statistically significant than the macular RNFL [3D 1000Topcon-OCT (AUC=0.8247; p=0.0585).

Conclusion: Our study results show that macular full retinal thickness (Stratus, Cirrus) is less successful in discriminating glaucoma from normal compared to measures of the macula RNFL alone (3DTocpon 1000) or the macular RNFL plus ganglion cell layer (GCC of RTVue).

Keywords: OCT; Glaucoma; macula; Ganglion cell complex.