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 sullied to review your abstract
(RE)

3. PRESENTATION PRE FERENCE (REQUIRED) Check one (1)
(a) Paper
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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 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

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

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5. ABSTRACT (REQUIRED)

Evaluation of Early Chorioretinal Abnormalities in Hypercholesterolemic Rabbits Submitted to the PPAR-gamma Agonist Treatment (Rosiglitazone): Histological and Histomorphometric Study

Rogil José de Almeida Torres, Maurício Maia, Dalton Bertolim Précoma, Michel E. Farah, Lucia Noronha, Luca Rodrigo Pasqualotto, Cristina Muciolli

1.Purpose: To evaluate, in a rabbit model, the degenerative histological abnormalities in the choroids and sclera following the daily administration of high cholesterol dosages as well as the possible prevention of these degenerative abnormalities following systemic administratior of oral rosiglitazone, an activator of agonist PPAR ocular gamma receptors. **2.Methods:** 55 New Zealand rabbits were studied and they were divided in four groups based on the diet that animals were submitted (normal diet or diet containing high levels of cholesterol): Control Group (CG) (06 rabbis): normal diet for six weeks; Second group (G1) (13 rabbits): 1% cholesterol diet for two weeks and then a 0.5% cholesterol diet for 4 weeks. Third group (G2) (18 rabbits):1%cholesterol diet for two weeks and then a 0.5% cholesterol diet for 4 weeks. Additionally, this group also received 3 mg of rosiglitazone daily after the third week since the beginning of the experiment. Fourth group (G3) (18 rabbits):1%cholesterol diet for two weeks and then a 0.5% cholesterol diet for 4 weeks. Additionally, this group also received 3 mg rosiglitazone since the beginning of the experiments.Data was analysed by Shapiro - Wilks-Test and P va lues lower than 0.05 were considered statistically significant. **3.Results:** No abnormalities were observed in CG. However, G1 group showed a significant increase in sclerochoroidal thickness (301,48 +/ -50,12)compared with CG(239,09 +/- 24,33)(p=0,005).The G2 group showed a sclerochoroidal thickness thinner(282,08 micrometers/DP36,44) than G1(301,48 +/ -50,12); however, this value was not statistically significant (p=0,222). The G3 group showed a sclerochoroidal thickness thinner(266,11 +/- 47,94) than G1(301,48 +/ -50,12); this value was statistically significant (p=0,02) A high number of histiocytes was observed in the scleral wall of rabbits submitted to a diet containing high levels of cholesterol (G1), followed by G2, G3 and CG, in a decreasing manner. **4.Conclusions:** This study revealed that hypercholesterolemia may lead to early degenerative abnormalities of the choroids and sclera of raabits and that the activation of agonist PPAR ocular gamma receptors, by means of oral administration of rosiglitazone, proved to be effective for the preservation of choroids and sclera anatomy. These findings may have clinical relevance as the rosiglitazones may offer a new treatment modality for dry and/or exsudative AMD in human eyes.