2009 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. CA

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)

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

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

Last Name: Gonçalves
First Name: Fabiana
Middle: da Fonte

Service (Sector): Cataract

CEP Number: Not required

5. ABSTRACT (REQUIRED):

Title: **CATARACT AND MICROCORNEA: A CASE SERIES IN A BRAZILIAN FAMILY**

Author and Co-authors (maximum 6): Fabiana F. Gonçalves, Heloisa Nascimento, Frank César M. Santiago, Lincoln L. Freitas, Eduardo S. Soriano.

Purpose: The purpose of this research is to analyze these rare cases of cataract and microcornea in order to do a genetic orientation, choose the best treatment and give the visual prognosis.

Methods: Five patients from the same family, first and second degree relatives, were seen in the cataract service of the São Paulo University of Medicine. They were submitted to clinical ophthalmic examination, topography, ultrasonography, biometry and genetics evaluation. The description of the cases was based on data from medical records and clinical examination done by the authors.

Results: All patients on the study had microcornea and a lamellar congenital cataract, except one who had done cataract surgery on both eyes. The cornea diameter varied from 8 to 11mm, and it had a very high curvature showed by the cornea topography. Although they had microcornea, the ocular ultrasonography didn't show microphthalmia. In addition, all of them, except one, had a nasal iris hypoplasia. The visual acuity was low in all patients, varying from 20/80 to counting fingers at 1m with pinhole. The phacoemulsification surgery was done in one of the patients, it increased his visual acuity in 2 lines and he referred improving visual quality.

Conclusion: This case series demonstrate a hereditary syndrome with a probably autosomal dominant inheritance. The combination of such ocular anomalies suggests a disorder affecting the anterior segment of eye development pathways. Although the surgery will probably improve the vision, the final result won't be very good, because of an amblyopic component. So it is important to explain the patient the visual prognosis and do a genetic orientation.

Keywords: congenital cataract, microcornea