

**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.

**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)

**78. FIRST (PRESENTING) AUTHOR (REQUIRED):**

Must be the author listed first in abstract body.

- ( x ) R1      ( ) R2      ( ) R3      ( ) PIBIC
- ( ) PG0      ( ) PG1      ( ) Fellow      ( ) Technician

Last Name: Yabiku  
 First Name: Mariann  
 Middle: Midori

Service (Sector): OCULAR PLASTIC SURGERY

CEP Number: 1625/09

**Evaluation of ocular wave front aberrations in patients with facial dystonia treated with botulinum toxin.**

**Authors:** Yabiku MM, Sartori JF, Sarraff EP, Isolane C, Cariello AJ, Freitas W, Osaki MH.

**Purpose:** To analyze the effect of botulinum toxin A treatment on ocular wave front aberrations of patients with facial dystonia.

**Methods:** Patients with benign essential blepharospasm (EB) and hemi facial spasm (HS) in activity were included. All patients were submitted to slit lamp examination and bilateral wave front analysis under pupillary dilatation using Alcon LADARvision wave front device. After that, the patients were treated with botulinum toxin A subcutaneous injections in the affected area performed by the same ophthalmologist. After one month, the wave front analysis was performed in the same way and by the same examiner. The main outcome measure was the change in ocular wave front aberrations.

**Results:** This study included three patients with EB and five with HS, totalizing eleven eyes. The male:female ratio was 1:1.7. The age ranged from 50 to 72 years with a mean of 65.9 ± 8.2 years. The mean of high order RMS wave front aberrations was 0.61 before the treatment and 0.57 one month after ( $p=0.09$ ). Before the treatment, the mean of defocus, astigmatism, coma and spherical aberration was respectively 0.80, 0.67, 0.47 and 0.16. One month after treatment, the mean of defocus, astigmatism, coma and spherical aberration was respectively 0.81, 0.64, 0.45 and 0.14. There was no significant difference in these aberrations before and after the treatment ( $p>0.05$ ).

**Conclusion:** the treatment of facial dystonia with botulinum toxin was not able to modify both the low and high order ocular aberrations.

**Keywords:** ocular high order aberrations, facial dystonias, botulinum toxin, wave front