

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

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED): PL

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'

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)

46. FIRST (PRESENTING) AUTHOR (REQUIRED):

Must be the author listed first in abstract body.

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

Last Name: Osaki
First Name: Tammy
Middle: Hentona

Service (Sector): Oculoplastic Surgery

CEP Number: 1024/09

5. ABSTRACT (REQUIRED):

Title: EFFECTS OF BOTULINUM TOXIN-A IN ORBICULARIS OCULI MUSCLE OF PATIENTS WITH BLEPHAROSPASM – PILOT STUDY

Author and Co-authors: Tammy H. Osaki, Suely K. N. Marie, Midori H. Osaki, Teissy Osaki, Rubens Belfort Jr

Purpose: To describe the alterations induced in human orbicularis oculi muscles by eyelid injections of botulinum toxin type A (BTX-A).

Methods: The orbicularis oculi muscles were obtained from 14 patients undergoing blepharoplasty or myectomy (10 with blepharospasm and 4 healthy, who underwent surgery for cosmetic purpose). Among those with blepharospasm, 3 had no previous treatment and 7 had received BTX-A injections 30 to 210 days before the surgical procedure. Fragments of skin and eyelid muscles were frozen in liquid nitrogen and were prepared by routine histological and histochemical staining, including hematoxilin eosin (HE), modified Gomori, periodic acid Schiff, NADH, cytochrome C oxidase, acid and alkaline phosphatases and ATPases 4.3 and 9.4.

RESULTS: A MARKED MORPHOLOGICAL DIFFERENCE IN MUSCLE FIBERS WAS OBSERVED BETWEEN CONTROL AND PATIENT GROUPS. WHILE MORPHOLOGY WAS PRESERVED IN NORMAL CONTROLS, ALL PATIENTS WITH BLEPHAROSPASM PRESENTED BASOPHILIC INTRACYTOPLASMIC ALTERATION OF MUSCLE FIBERS, STRONGLY SUGGESTIVE OF MITOCHONDRIAL PROLIFERATION. ALL PATIENTS SUBMITTED TO BTX-A INJECTION PREVIOUS TO SURGERY PRESENTED MARKED POSITIVITY TO ACID PHOSPHATASE.

Conclusion: Blepharospasm was associated to morphologic alteration in eyelid muscles, independent to BTX-A treatment.

Keywords: Blepharospasm, orbicularis oculi, botulinum toxin-A