

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

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED):

(CO)

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 13, 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)

85. FIRST (PRESENTING) AUTHOR (REQUIRED):

Must be the author listed first in abstract body.

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

Last Name: **Azevêdo**

First Name: **Rodrigo**

Middle: **de Nápole**

Service (Sector): **CO**

CEP Number: **0927/06**

5. ABSTRACT (REQUIRED):

Title: Fluorescein Clearance Test as an additional diagnostic tool for Dysfunctional tear syndrome

Author and Co-authors (maximum 6): RN Azevêdo, MD; JB da Silva, MD; A Guimarães, MD; RM Hazarbasanov, MD; JAP Gomes, MD

Purpose: To introduce the Fluorescein Clearance Test (FCT) as an additional tool for diagnosis of dysfunctional tear syndrome (DTS)
Methods: Clinical study with non-randomized diagnostic intervention. 40 patients from both sexes, with DTS, in which 20 had evaporative dry eye (EDE) and 20 had aqueous tear-deficient dry eye (ADDE). Patients were submitted to routine ophthalmological examination, Ocular Surface Disease Index (OSDI) questionnaire and subjected to the following tests: Fluorescein Break-Up Time (FBUT), Schirmer I without topic anesthesia and FCT (performed on the second visit).

Results: Diagnosis of DTS was defined by OSDI score (%). EDE patients presented 49.59±17.87 mean score, while for ADDE was 48.99±25.61 (25-75% = moderate DTS; t test, p>0.05). FBUT mean time measured for EDE was 6.08±3.18 and ADDE was 5.31±3.58 seconds (t test, p>0.05). FCT values were statistically different between EDE on 5 minutes - 11.81±8.8 - and ADDE - 6.14±7.34 (standardized color intensity relative values; t test, p=0.0373). Remaining observation periods did not show statistical significance up to 25 minutes (t test, p>0.05). Additionally, after 30 minutes, with nasal stimulus, mean EDE fluorescein staining was 20.81±9.37 and for ADDE, 12.06±11.95 (t test, p=0.0175). Dilution of fluorescein observed on Schirmer filter papers compared to standardized dilution curve was significantly higher for ADDE group for 5, 10, 15 and 20 minutes from the beginning of the test (Student paired t test, p<0,05).

Conclusion: FCT is a promising tool for diagnosis of DTS and determinate difference between EDE and ADDE.

Keywords: Dysfunctional Tear Syndrome, Fluorescein Clearance Test fluorescein