

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

2. SCIENTIFIC SECTION PREFERENCE (REQUIRED):

LA

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'

Tiago Massao Yamanaka

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)

93. FIRST (PRESENTING) AUTHOR (REQUIRED):

Must be the author listed first in abstract body.

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

Last Name: Yamanaka

First Name: Tiago

Middle: Massao

Service (Sector): Laboratório de Microbiologia Ocular

CEP Number:

5. ABSTRACT:

Decreased susceptibility to 8-metoxifluoroquinolones in coagulase-negative *Staphylococcus* isolated from conjunctiva

TM Yamanaka, PJM Bispo, ACC Pignatari, MCZ Yu, ME Farah, AL Höfling-Lima

Purpose: Species identification and antimicrobial susceptibility testing of coagulase-negative *Staphylococcus* (CNS) isolated from normal conjunctival microbiota.

Methods: Thirteen CNS strains isolated from normal conjunctival microbiota before and after the use of moxifloxacin (MX) eye drops were included. Bacterial strains were identified and susceptibility tests done by using the Phoenix automated system. Minimal Inhibitory Concentration (MIC) values for gatifloxacin (GX) and MX were also evaluated by Etest strip method.

Results: Among 13 CNS isolates, 7 (53.8%) were *S. epidermidis*, 4 *S. hominis* (30.7 %) and 1 (7.7%) *S. capitis* sub. *ureolyticus*. One isolate was not identified by the Phoenix system. In total, 53.8% isolates were susceptible to GX and MX with a MIC range of 0.032 to 0.094 µg/ml. All of these samples were collected before the use of MX. CNS isolates (n=6) showing GX and MX decreased susceptibility were recovered after MX use, being that 5 demonstrated MIC ranging from 1.0 µg/ml to 2.0 µg/ml and 1 isolate a MIC value >32 µg/ml.

Conclusion: Although *S. epidermidis* and *S. hominis* have been the main isolated CNS from conjunctival samples, other species with reduced antimicrobial susceptibility may be recovered. Epidemiological surveillance studies including 8-metoxifluoroquinolone resistance mechanisms elucidation in CNS isolated from normal and infected eyes may contribute to the evaluation of new approaches to the infection prophylaxis in external ocular surgeries.

Keywords: coagulase-negative *Staphylococcus*, conjunctival microbiota, fluoroquinolone resistance