2007 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 sullied to review your abstract
TU

3. PRESENTATION PREFERENCE (REQUIRED) Check one (1)
(a) Paper
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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 Decl aration of Heisinki and the 'UNIFESP Ethical Committee"

Signature of First

Scientific Section Descriptions

(OR) ORBIT
(PL) OCULAR PLASTIC SURGERY
(RE) RETINA / VITREOUS
(RX) REFRACTION-CONTACT LENSES
(NO) NEURO-OPHTHALMOLOGY
(TU) TUMORS AND PATHOLOGY
(ST) STRABISMUS
(UV) UVEITIS
(LS) LACRIMAL SYSTEM
(LV) LOW VISION
(CO) CORNEA / EXTERNAL DISEASE
(GL) GLAUCOMA
(RS) REFRACTIVE SURGERY
(CA) CATARACT
(US) OCULAR ULTRASOUND
(TR) TRAUMA
(LA) LABORATORY
(BE) OCULAR BIOENGINEERING
(EP) EPIDEMIOLOGY
(EF) ELECTROPHYSIOLOGY

Deadline: 29/10/2007

FORMAT:
Abstract should contain:
Title, Name of Authors, Name of other authors (maximum 6), Purpose, Methods, Results, Conclusions.
Example: ARVO (1.10 x 1.70)
Abstract Book

1. FIRST (PRESENTING) AUTHOR (REQUIRED)
Must be author listed first in body of abstract

( ) R1 ( ) R2 ( ) R3
( ) PG0 **(X) PG1** ( ) Estagiário ( ) Tecnólogo ( ) PIBIC

BARROS JEISON DE NADAI
Last Name First Middle

TUMORS AND PATHOLOGY 0162/05
Service (sector) Nº CEP

Prediction of Malignancy in Ocular Surface Epithelial Lesions: Prognostic Parameters Based on the 2001 Bethesda System.

Jeison de Nadai Barros, Marcia Lowen, Priscilla Luppi Ballalai, Vera Lucia Mascaro, Maria Cristina Martins.

Purpose: to develop the fi rst scoring system for clinical use in predicting malignancy by impression cytology (IC) and to assess its validity. **Methods**: a transversal prospective observational study was conducted: IC was performed on epithelial lesions surface with premalignant or m alignant clinical signs and without previous topical chemotherapy. Specimens that exhibited atypical cells on optical microscopy analysis were included and evaluated in a manner similar to that used in the 2001 Bethesda system for cervical citopathology. F or each sample, 11 prognostic parameters were assessed to verify cytological features that are the most predictive of malignancy. Lesions were excised and submitted to histopathogical study in which consensus existed regarding the diagnosis between two exp erienced ocular pathologists. Histopathology was considered gold -standard. Logistic regression was used for modeling results and receiver operating characteristic curve (ROC) analysis assessed the validity of the scoring system. **Results**: 39 lesions were s tudied and histopathological diagnosis was pterygium in 1 case, actinic keratosis in 9 cases, intraepithelial neoplasia in 9 cases and invasive squamous cell carcinoma in 20 cases. On the basis of the statistical probability to predict malignancy 7 prognos tic parameters were included: nuclear size, chromatin, nucleoli, sincicial -like group, nucleus cytoplasmic ratio, cytoplasmic stain and cytoplasmic borders. Each parameter was assigned a numerical value based on the strength of logistic regression and the summation was the total predictive score tabulated for each lesion. ROC curve analyses demonstrated an area under the curve of 0,927 and a score of 4,25 as the cutoff that best discriminates invasive malignant lesion (sensitivity of 95%, specificity of 93% , positive predictive value of 95% and negative predictive value of 93%). A score of 4,25 or more represents invasive squamous cell carcinoma, scoring 3,40 suggests malignant intraepithelial neoplasia and scoring 0,40 points to premalignant actinic keratos is. **Conclusions**: the study statistically validated the utility of this new IC - based score developed for the pretreatment prediction of malignancy in ocular surface epithelial lesions. Its predictive performance can be enhanced by prospective use and integration with clinical evaluation.