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
(RE)

3. P RESENTATION PREFERENCE (REQUIRED) Check one (1)
(a) Paper
(b) Poster

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 Heisinki and the 'UNIFESP Ethical Committee"

Signature of First

Scientific Section Descriptions

(OR) ORBIT
(PL) OCULAR PLASTIC SURGERY
(RE) RETINA AND VITREOUS
(RX) REFRACTION-CONTACT LENSES
(NO) NEURO-OPHTHALMOLOGY
(TU) TUMORS AND PATHOLOGY
(ST) STRABISMUS
(UV) UVEITIS
(LS) LACRIMAL SYSTEM
(LV) LOW VISION
(CO) CORNEA AND 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

Lima	Luiz Henrique	Soares Gonçalves
Last Name	First Name	Middle

Doheny Eye Institute
University of Southern California (USC)
Service (sector)

Nº CEP
(Comitê de Ética em Pesquisa da Universidade Federal de São Paulo–UNIFESP)

5. ABSTRACT (REQUIRED)

Title: Transretinal Fixation of Polyimide Strips

Author: L.H. Lima

Other authors: J. Wang, W. Liu, J. Weiland, R. Agrawal, M. Humayun

Purpose: To study long term effects of transretinal fixation of polyimide strips

Methods: Polyimide strips of 2 different lengths were inserted into subretinal space in pigmented rabbits, after a routine 2 -port vitrectomy. In group A (7 rabbits), the strip was 6 x 0.5 mm, while in group B (10 rabbits), it was 4 x 0.5 mm. Group B rabbits received laser photocoagulation around the retinotomy site. The rabbits were followed up for 6 months, with routine evaluations like indirect ophthalmoscopy, intraocular pressure measurements, fundus photography, fluorescein angiography (FA) and optical coherence tomography (OCT). Rabbits were euthanized in the event of failed surgery or retinal detachment.

Results: Fifteen of 17 rabbits underwent successful subretinal implantation of the strip. The polyimide strip created sufficient retinotomy in all cases. There were no immediate complications noticed on follow -up, including dislocation, vitreous hemorrhage or retinal detachment. Subretinal fluid was noticed around the retinotomy site in fewer cases in group B compared to group A. Four of 7 cases in group A had strip dislocation (average time: 4.5 months), while one of 8 cases in group B showed dislocation (average time: 3 months). FA or OCT did not reveal any significant findings. Gross ocular examination after euthanasia did not reveal any significant changes like retinal detachment or proliferative vitreoretinopathy.

Conclusions: Polyimide strips of specific lengths can be surgically inserted into the subretinal space and show stable localization, without significant side-effects. Further work is in progress to study other methods of fixation and electrical stimulation.