

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 suited to review your abstract  
**RETINA / VITREOUS**

3. PRESENTATION PREFERENCE (REQUIRED) Check one (1)  
 (a) **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"

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  
 FORTES FILHO \_\_\_\_\_ JOÃO \_\_\_\_\_ BORGES  
 Last Name First Middle  
 RETINA 0949/04  
 Service (sector) N° CEP

**Low weight gain in at 6<sup>th</sup> week of life as a risk factor for retinopathy of prematurity (ROP)**

João Borges Fortes Filho, Pedro Paulo Bonomo, Renato S Procianny

**Purpose:** To analyze the low weight gain by the sixth week of life as an independent risk factor for the development of ROP.

**Methods:** An institutional, prospective, observational cohort study to compare the incidence of ROP and the postnatal weight gain included preterm newborns with birth weight  $\geq 1,500$  g or gestational age at birth  $\geq 32$  weeks admitted to Hospital de Clínicas de Porto Alegre, Brazil from October 2002 to December 2006. All babies were included, except those that died before completing the sixth week of life. The clinical outcome was the development of ROP at any stage. Patients were divided in three groups according to the weight gain by the sixth week:  $\geq 33^{\text{th}}$  percentile (low weight gain),  $3^{\text{rd}}-66^{\text{th}}$  percentile (intermediate weight gain) and  $\geq 67^{\text{th}}$  percentile (high weight gain). The incidence of ROP was determined. Chi-Square test was used to compare the patients with and without ROP. Relative risk with 95% confidence interval was calculated. Logistic regression was performed to determine if the weight gain was related to the development of ROP independent of other factors.

**Results:** Of 348 newborns, 91 (26.1%) had ROP. The relative risks for the low weight gain and for the intermediate weight gain groups were 7.40 (95%CI 2.97 -18.44;  $P < 0.001$ ) and 3.8 (95%CI 1.55 -9.31;  $P < 0.003$ ) respectively, meaning a higher risk for development of ROP in these groups.

**Conclusions:** The low weight gain by the sixth week of life was an important risk factor for ROP at any stage in our study.