

( ) R1 ( ) R2 ( ) R3 ( ) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( )  
PIBIC Last Name - Torres First Name - Rogil Middle - José de\_Almeida

Service (sector) Retina and Vitreous N° CEP

### **ANGIOGRAPHY: SECURITY X ECONOMICS**

Rogil José de Almeida Torres (1), Cristina Muccioli (2), Antonio Marcelo Barbante Casella (3), Eduardo Regonha (4), Andréa Luchini (5), Wilma Weiss (5), Paulo Roberto Freceiro (5)

**Purpose:** The objective of this study is to evaluate the safety, effectiveness and cost of the angiofluoresceinographic examination by using both the least amount of dye as well as of digital equipment along with a laser photocopier. **Methods:** Prospective and comparative study carried out in a group of 70 patients, which underwent an angiographic evaluation with a conventional retinographer injecting 5 ml of sodic fluorescein at 10% (control group) as well as a group of 70 patients which underwent an angiographic evaluation with a digital retinographer injecting 2 ml of fluorescein at 10% (study group). The arterial pressure, heart beat frequency and oximetry were assessed prior and after the dye injection. Organic reactions related to the examination were reported. The photograph quality as well as cost between the two techniques were compared. **Results:** The control group patients showed a greater increase in systolic and diastolic arterial pressure. Heart beat frequency, oximetry measurement and adverse reactions did not show any significant statistic differences between both groups. As for the quality of photographs, a better performance was noticed in the control group. As for the cost, the examination carried out in the study group required lower cost and thus saved around 54.8% per examination in relation to the control group. **Conclusion:** The examination carried out with a lower dose of fluorescein using digital equipment along with a laser photocopier provided greater stability in the systolic and diastolic arterial pressure. However, it did not have any influence on heart beat frequency, oximetry or adverse reactions such as nausea, vomiting, syncope and rashes. The quality of photographs was poor although they enabled diagnosis as well as therapy follow-up to those who carried out the examination. Economically wise, it proved to be as profitable as 66.26% against 25,81% when using conventional equipment.