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### **High resolution angiogram in the identification of choroidal neovascularization induced by argon laser in rodent models**

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**Purpose:** To assess the pattern of choroidal neovascularization (CNV) in mice and rats models by the high resolution retina angiograph - HRA-II (Heidelberg Engineering, Germany). **Methods:** Four pigmented Zucker rats, four C57BL mice and four Wistar albino rats underwent 4 retinal argon laser photocoagulation spots around the optic disk. The laser parameters used were: 1. Power: 100, 200, 300 and 400 milliwatts (mW); 2. Spot Size: 100 micrometers; 3. Duration: 100 milliseconds. The clinical parameters used to consider the laser burns effective for subretinal CNV was a tiny subretinal air bubble at the site of the laser observed right after the photocoagulation procedure. Two and three weeks after photocoagulation, the animals were evaluated for laser-induced CNV by fluorescein angiogram using the HRA II (Heidelberg, Germany). **Results:** Laser-induced CNV was observed in Zucker rats using 300mW and 400mW of power and also in C57BL mice using 300mW. None of the albino Wistar rats developed CNV. The CNV complex was identified for the first time 2 weeks after laser photocoagulation. The leakage of fluorescein increased at the 3 weeks follow up period.

**Conclusions:** In rodent models, CNV formation was observed in pigmented Zucker rats and also C57BL mice using an argon laser spot size of 100 micrometers, duration of 100 milliseconds and 300 to 400mW. HRA-II was a very useful device to detect CNV. This model may be important for further studies about CNV therapy.