

ABSTRACT

**THE EFFECT OF AEROBIC EXERCISE MODIFICATION ON REDUCED
INTRAOCULAR PRESSURE IN OPEN ANGLE GLAUCOMA PATIENT
A Pre-Experimental in Dr Soetomo Hospital**

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Elevated intraocular pressure is the major risk factor for open angle glaucoma. It is usually can be controlled by eye-drops and oral medication. Aerobic exercise modification can become alternative to reduces intraocular pressure. This objective of the study was to analyzed the effect of aerobic exercise modification on reduced intraocular pressure in open angle glaucoma patient.

Pre-experimental static group comparison design was used in this study. The sample were 10 patient with open angle glaucoma in Dr Soetomo hospital Surabaya and 5 health people were selected and non-randomized assignment divided into 3 groups. Intraocular pressure was measured by schioltz tonometer. Paired t-test and independent t-test were used to analyze the data of intraocular pressure with significance level of $p = 0,05$.

Result showed that intraocular pressure in open angle glaucoma patient using independent t-test was decreased in treatment group compared with control group had significance level of $p=0,047$. In health people group also were found decrease after treatment in 4 people (80%) with significance level of $p=0,012$ by using paired t-test.

It can be concluded that there are significantly effect of aerobic exercise modification on reduced intraocular pressure in open angle glaucoma patient. Further studies should involve higher exercise intensity , to control other factors such as valsava maneuver, caffeine, or over hydration that effect intraocular pressure exchange as far as possible.

Key words : Intraocular pressure, open angle glaucoma, aerobic exercise.