

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo PIBIC

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Middle -

Service (sector)

Retina and Vitreous

Nº CEP

Diabetic Retinopathy and physical activity.

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Introduction: In diabetic patients, aerobic exercises improve or maintain cardiovascular function, increase levels of HDLs, aid in weight control, increase insulin sensitivity and reduce risk factors for vascular disease.

Purpose: To evaluate the relationship between physical activity (PA) and diabetic retinopathy (DR)

Methods: We examined 496 subjects diagnosed with diabetes type II, who were participants in the “Mutirão do olho diabético” – EPM UNIFESP. They were asked about the duration of the disease and the type of diabetes. The diabetic retinopathy was classified by indirect ophthalmoscopy according to EDTRS. The patients were classified into proliferative and non-proliferative diabetic retinopathy. An interviewer-administered standardized questionnaire, assessed physical activity.

Results- Patients performing physical activity constituted a group of 145 people; 96 (66%) had non-proliferative diabetic retinopathy (group 1 A) and 49 (34%) proliferative diabetic retinopathy (group 1B). The group classified as performing physical activity had 351 subjects; 191 (54%) had non-proliferative diabetic retinopathy (group 2 A) and 160 (46%) proliferative diabetic retinopathy (group 2 B). The mean duration of diabetes was: Group 1A – 8 years, group 2A – 7 years, group 1 B – 13 years and group 2 B – 11 years. We found a statistical significant difference between the practice of exercise and the status of retinopathy and no statistically significant difference between duration of disease in group 1 A/group 2 A and group 1 B/ group 2 B.

Conclusions: Regularly performed exercise is a factor related to diabetic retinopathy progression.