

18th Joint event on

EUROPEAN OPHTHALMOLOGY CONGRESS & OCULAR PHARMACOLOGY

December 04-06, 2017 | Rome, Italy

Diabetic retinopathy and physical inactivity

Anna Praidou^{1,2,3}

¹Royal Free London NHS Foundation Trust, UK

²Hellenic Open University, Greece

³General Hospital of Thessaloniki "G. Gennimatas-O Agios Dimitrios", Greece

Statement of the Problem: Physical inactivity, along with hypertension, obesity, smoking, and hyperglycaemia are considered as potential risk factors for diabetic disease. A prospective study was conducted to investigate if any correlation between levels of physical inactivity and severity of diabetic retinopathy.

Methodology & Theoretical Orientation: Patients with diabetes type 2 (patients with moderate and patients with severe non-proliferative diabetic retinopathy, and patients with proliferative diabetic retinopathy) were compared with non-diabetic patients. Physical activity of patients was assessed by the international physical activity questionnaire. Levels of HbA1c and BMI were also recorded in diabetics. Comparisons between all four groups were attempted for levels of physical activity.

Findings: Physical activity was decreased significantly in patients with severe non-proliferative diabetic retinopathy and proliferative diabetic retinopathy as compared to patients with moderate non-proliferative diabetic retinopathy and to the control group. Significant negative correlation was detected between HbA1c levels, BMI, the severity of diabetic retinopathy and physical activity.

Conclusion & Significance: Physical inactivity is associated with more severe levels of diabetic retinopathy.

Recent publications:

1. Booth M L (2000) Assessment of physical activity: an international perspective. *Res Q Exerc. Sport.* 71(2 Suppl):s114-s120.
2. Dirani M, Crowston J, van Wijngaarden P (2014) Physical inactivity as a risk factor for diabetic retinopathy? a review. *Clinical and Experimental Ophthalmology.* 42(6):574-581.
3. Praidou A, Harris M, Niakas D, Labiris G (2017) Physical activity and its correlation to diabetic retinopathy. *J. Diabetes Complications.* 31(2):456-461
4. Praidou, A, Androudi, S, Brazitikos et. al. (2014) Diabetic retinopathy treated with laser photocoagulation and the indirect effect on glycaemic control. *J Diabetes Res.* 2014:1-3.
5. World Health Organization (2010) Global recommendations on physical activity for health. Switzerland: World Health Organisation, WHO.

Biography

Anna Praidou received her Medical degree, completed her PhD thesis and her residency at the University of Thessaloniki, Greece. She completed MSc in Medical Research Methodology at the University of Thessaloniki, Greece and another MSc in Health Unit Management at the Open University of Patra, Greece. After completion of her training in Ophthalmology she worked at Alder Hey Hospital, Liverpool in Pediatric Ophthalmology, at Royal Liverpool University Hospital in Medical Retina, Uveitis, and Ocular Oncology Services. She was previously also working at Moorfields Eye Hospital, London in the Cataract Service and at the Royal Free Hospital, London in Medical Retina and Cataract services. She is currently working as a Consultant Ophthalmic Surgeon in NHS.

praidou2003@yahoo.co.uk