Abstract

Objectives: To describe usual physical activity level and analyze its association with metabolic control and presence of microvascular complications in a cohort of patients with type 1 diabetes (DM-1) in south Spain. Methods: Observational, cross-sectional study that included one hundred thirty patients, aged 33.9 ± 11.5 years-old with disease duration of 16.5 ± 9.5 years that consecutively were recruited among patients attending the Endocrinology Service of Puerta del Mar University Hospital (Cádiz, Spain). Usual physical activity level was assessed using the “General Practice Physical Activity Questionnaire” (GPPAQ) together with clinical, anthropometric, metabolic parameters and microvascular complications. Results: DM-1 patients were grouped in four categories of physical activity level: inactive (n = 33; 25.3%), moderately inactive (n = 31; 23.8%), moderately active (n = 26; 20.0%) and active (n = 40; 30.9%). We observed no significant differences in glycated haemoglobin (HbA1c) level between the different physical activity groups analyzed. Patients classified as moderately active and active were more often men, significantly younger and presented lower plasmatic levels of triglycerides than patients classified as inactive or moderately inactive, with no differences in other clinical or anthropometric variables. In addition, active and moderately active patients had a lower prevalence of diabetic retinopathy and microvascular complications in general compared to inactive or moderately inactive patients. Conclusions: Half of patients with type 1 diabetes evaluated were classified as inactive and these patients had a higher prevalence of diabetic retinopathy than active patients. No difference in HbA1c levels was documented among different groups of physical activity

Keywords

Type 1 diabetes. Glycated haemoglobin.
Metabolic control. Physical activity.