

Relationship between Prolonged Timed up and Go Test and Worse Cardiometabolic Diseases Risk Factors Profile in a Population Aged 60-65 Years

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Abstract : Introduction: Functional capacity is one of the basic determinants of health in older age. Functional capacity may be influenced by multiple disorders, including cardiovascular and metabolic diseases. Nevertheless, there is relatively little evidence regarding the association of functional status and cardiometabolic risk factors. Aim: The aim of this research is to check possible association between functional capacity and cardiovascular risk factor in a group of younger seniors. Materials and Methods: The study group consisted of 300 participants aged 60-65 years (50% were women). Total cholesterol (TC), triglycerides (TG), high density lipoprotein cholesterol (HDL-C), low density lipoprotein cholesterol (LDL-C), glucose, uric acid, body mass index (BMI), waist-to-height ratio (WHtR) and blood pressure were measured. Smoking status and physical activity level (by Seven Day Physical Activity Recall Questionnaire) were analysed. Functional status was assessed with the Timed Up and Go (TUG) Test. The data were compared according to gender, and then separately for both sexes regarding prolonged TUG score (>7 s). The limit of significance was set at $p \leq 0.05$ for all analyses. Results: Women presented with higher serum lipids and longer TUG. Men had higher blood pressure, glucose, uric acid, the prevalence of hypertension and history of heart infarct. In women group, those with prolonged TUG displayed significantly higher obesity rate (BMI, WHtR), uric acid, hypertension and ischemic heart disease (IHD), but lower physical activity level, TC or LDL-C. Men with prolonged TUG were heavier smokers, had higher TG, lower HDL and presented with higher prevalence of diabetes and IHD. Discussion: This study shows association between functional status and risk profile of cardiometabolic disorders. In women, the relationship of lower functional status to cardiometabolic diseases may be mediated by overweight/obesity. In men, locomotor problems may be related to smoking. Higher education level may be considered as a protective factor regardless of gender.

Keywords : cardiovascular risk factors, functional capacity, TUG test, seniors

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