Neuromuscular training in institutionalized older adults: A functional approach to preventing fall [Entrenamiento neuromuscular en adultos mayores institucionalizados: Un abordaje funcional para la prevención de la Caída]

Martinez A.
Selaive R.
Astorga S.
Olivares P.

Introduction: Neuromuscular training has shown benefits in preventing falls in older adults in the community. However, in those who live in institutionalized centers, this training is not yet incorporated on a regular basis, increasing morbidity and mortality for this cause. Objective: To assess the effect of neuromuscular training on the risk of fall in institutionalized older adults.

Methods: Type-controlled clinical trial with random distribution to single blind. We studied 33 subjects (20 men and 13 women) between 60 and 85 years residents of institutionalized centers in the city of Talca. The sample was selected in a non-probabilistic intentional type. The experimental group performed neuromuscular training for 12 weeks, 3 times a week and the control group continued its usual activities. Pre- and post-workout evaluations were performed. weight, height, BMI, blood pressure (systolic, diastolic), SO2, risk of fall and physical-cognitive functions were assessed. Data normality was determined by Shapiro - Wilk test. The Anthropometric and physiological tests by means of test T for independent samples and risk of fall and physical-cognitive functions through Ancova. In all cases a P < 0.05 was adopted. Results: 60% of the sample were males and 40% women. The average age was 74 years. There were no significant differences between the groups for anthropometric and physiological variables (p < 0.05). There were significant differences in the variation of the risk of fall and its physical-cognitive co-variates (P < 0.05).

Discussion: These results would support the development of public policies in long-stay centres so that this modality of physical activity is considered as an effective intervention strategy in the prevention of fall. Conclusion: Neuromuscular training significantly decreased the risk of fall in
institutionalized older adults mediated by significant changes in their physical-cognitive functional capacities. © 2018 Sociedad espanola de dietetica. All rights reserved.

Elderly

Home for the aged

Physical Exercise

adult

aged

analysis of covariance

article

blood pressure

body mass

clinical article

cognition

controlled clinical trial

controlled study

exercise

female

functional status

height

home for the aged

human

human experiment

human tissue

male

physical activity

public policy
resident

risk assessment

single blind procedure