Benefits of Exercise in Self Improvement in Elderly Patients With Cardiovascular Diseases

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Introduction

Physical Exercise (PE) seems positively influence the functional autonomy. The aim of this study was to investigate the benefits of a program to improve the EF functional autonomy in elderly patients with cardiovascular disorders.

Methodology

A total of 39 seniors, including 28 females and 11 males, with a mean age of 77 years, underwent a 90-day program EF. The program consisted of fine and gross motor control sessions, individual counseling, gait training and sensory stimulation. These sessions were held for 5 days per week with a duration of 55 minutes each. This study consisted of two phases: an initial, before the implementation of the program and the other end, after the application. In these moments, were taken several measures kinanthropometric (HR rest, maximal HR, systolic BP, diastolic BP, BMI, weight, Test March 6 mins Rikli & Jones) and performed a functional assessment of activities of daily living (AIV'S), with application Scale Lawton (1969). The comparison between the behavior of variables kinanthropometric and "score" total autonomy in IADL assessed'S (Scale Lawton, 1969) at baseline and the end was done by t test for related samples. And he made the comparison at the time of the initial and final behavior of the 9 items that constitute the scale of Lawton, through the sign test for Related Samples.

Results

When comparing the "score" of Autonomy at the beginning and end found a statistically significant increase of the values of autonomy, having seen an average increase of 7 (95% CI: 5.4 to 7.7). We also found statistically significant differences between the measures kinanthropometric the initial and final moments, when there was an average decrease in the following variables: 4.8 bpm in resting HR (95% CI: 1.2 - 8.3) and 1.1 HMG in systolic BP (95% CI: 1.5 - 2). It was also observed an average increase of 81.5 m in Test 6 Mins Walking (95% CI: 61.9 to 101.1). The results obtained by studying the behavior of each of the items of the Lawton Scale (1969) were also statistically significant differences in the ability to climb stairs (10.3% - 82.2%), ability to perform gear abroad (12.8% - 74.4%), ability to make purchases (2.6% - 41%), ability to wash, dry and put away clothes (0% - 48.7); ability to perform cleaning (0% - 48.7); cooking capacity (7.7% - 56.4%); ability of small arrangements (0% - 38.8%), ability to use the phone (76.9% - 89 7%) and ability to handle the money (48.7% - 64.1%).

Discussion of Results

The results of the study suggest that the comparison of the initial and final time kinanthropometric measures, an average decrease of 4.8 bpm (95% CI: 1.2 - 8.3) and resting HR in systolic BP of 1.1 HMG (95% CI: 1.5 - 2). Second, Michel (1) (2001) the EF has a positive impact on hypertension. It was also observed an average increase of 81.5 m in Test 6 Mins Walking (95% CI: 61.9 to 101.1). In the study by Sousa (2) et al. (2010) sought to compare the level of functional ability and practice of EF in adults and

the elderly with chronic diseases were statistically significant differences in the re-test Test March 6 min, where there was an increase in the number of meters traveled. The results obtained in the "Score" of autonomy through the Lawton Scale (1969), we observed a statistically significant increase in the values of autonomy, having been an average increase of 7 (95% CI: 5.4 to 7.7). In the study by Correia (3) et al. (2010) found statistically significant improvement in functional capacity in elderly patients with diabetic disease practitioners EF.Os results for each of the items of the scale of Lawton, helped strengthen all results. In this context, it appears that this program EF was effective for the improvement of autonomy in IADL'S in locomotor capacity and cardiovascular endurance. However, it was not effective in reducing body weight.

References

- (1) Correia A.C., et al. (2010), *Influência do Exercício Físico Aeróbio na Funcionalidade e na Qualidade de Vida de Idosos Diabéticos*, Ministério da Educação Física, Viçosa, Edição Especial, n.5
- (2) Michel J., (2001), Actividade Física para Adultos com mais de 55 anos, eds. Manole, Brasil
- (3) Sousa D.J. & Guerra I., (2010), Efeitos de um Programa de Actividade Física na Capacidade Funcional em Portadores de DCNT'S, Centro de Convenção Maceió, Instituto Federal de Educação, Ciência e Tecnologia do Ceará: Campus Juazeiro do Norte