

The memory in elderly with Alzheimer's disease participants of a physical activity program #68

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The physiopathology of Alzheimer's disease (AD) is characterized by the formations of senile plaques and tangles fibro-neurals causing neural death, leading to impairment of memory. The aim of this study was to analyse the effects of a systematic program of physical activity on the learning and evocational memories in elderly with AD. Participated of the study 11 elderly people with AD, five elderly people (mean age = 81.4 ± 5.03 years old) participated in the training group (TG), while the control group (CG) had six elderly people (mean age = 82.1 ± 3.06 years old). The subjects performed three weekly sessions of physical activity, for 60 minutes, during six months. To analyse the memories, the Brief Battery of Cognitive Screening (BBRC) was used. Data analysis was performed with descriptive statistics, U-test and Mann Writney Wilcoxon test with a significance level of 5% ($p < 0.05$). To learning memory, the mean obtained by the CG and TG respectively, in the initial evaluation was 4.00 ± 1.55 and 3.4 ± 2.07 and in the final evaluation, the mean was $4.00 \pm 2, 90$ and 3.60 ± 1.82 . To evocation memory, were found the following means: in the initial and final evaluations for the CG and TG respectively, 2.33 ± 2.25 and 1.50 ± 2.35 , 1.64 and $1.8 \pm 1.8 \pm 1.79$. The Wilcoxon test did not show significant differences in the data. The physical activity was not enough to cause changes in memories. The result can be explained by the fact that patients already have an irreversible neuronal loss, however the maintenance of the memory was observed and this is an important finding for AD elderly patients.

Key words: physical activity; Alzheimer's disease; memory.