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The effects of physical program on cognitive function & exercise capacity in patients with dementia

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The purpose of the present study is to investigate the effects of long-term exercise program on exercise capacity and cognitive function in male patients with dementia. 24 male patients were divided into two experimental groups : the exercise group (n=12) and the control group (n=12). The exercise group participated in regular exercise program for 12 months, and their exercise capacity (cardiopulmonary function, muscle strength, muscular endurance, flexibility, balance, agility) and MMSE (Mini-mental state examination) levels were evaluated at baseline (pre), after 6 months (mid), after 12 months (post). The subjects carried on group exercise of VO_2max 30-60%, 30-60 minute a day, 2-3 times per week. Statistical techniques for data analysis was paired samples t-test. The level of statistical significance was $\leq .05$.

The results of this study were summarized as follows: In the exercise groups, there were significant differences in cardiopulmonary function, muscle strength, muscular endurance and MMSE at the times of pre & mid and pre & post, there were significant differences in balance and agility at the time of pre & post only, whereas there was no significant difference in flexibility following the long-term exercise. In the control groups, there were no significant differences in all times. Based on the results of this particular study, one year exercise program increases on the cognitive function & exercise capacity in male patients with dementia.