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Exercise Training on Congnitive Function and Exercise Capacity of Senile Dementia Patients

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Background: Dementia population in worldwide is considerable in the aged people. Exercise regulates the brain function, but the mechanism by which it does so is unknown. *Objective:* The effect of regular exercise on cognitive function and exercise capacity in senile dementia patient was investigated. *Methods:* Thirty female patients with senile dementia who participated in the study were divided into two groups: the exercise group (EG, n=15) and the control group (CG, n=15). The exercise group completed regular exercise program, and their cognitive function (MMSE: mini-mental state examination), activities of daily living (ADL) and exercise capacity (cardiopulmonary function, muscle strength, muscle endurance, flexibility, balance, agility) levels were evaluated at baseline, 6 months and after 12 months. Subjects exercised 30-60 minute a day, 2-3 times per week for 12 months. *Results:* MMSE and ADL score were significantly enhanced in exercise group with senile dementia, compared to these of control group. Exercise capacities in exercise group also increased as period dependent manner. *Conclusion:* These results suggested that senile dementia may improve by participating in a regular exercise program.

Key words: Mini-mental state examination, activities of daily living, cardiopulmonary function, muscle strength, muscle endurance, flexibility.

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The Advantage of Resistance Exercise for Aerobic Capacity Among Old Adults and CAD Patients

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Aerobic capacity is an important health indicator which is related to the probability of disease, disability, and mortality. Typically, endurance exercise is known as the primary method of improving aerobic capacity. Although most of resistance exercises are not considered for a good method increasing aerobic capacity, low to moderate intensity resistance exercise with short rest periods may improve aerobic capacity, especially old adults and most low to moderate risk patients suffering from CAD. This review is to understand that a number of physiological changes occur during both aerobic and resistance exercise, and to support that resistance exercise has advantages for improving aerobic capacity.

Key words: Maximum Oxygen consumption, Heart rate, Strove volume, Blood pressure, Arteriovenous oxygen difference.