심폐재활

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:00-10:45 Room G(3F)

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Cardiac Rehabilitation in Patients with Coronary Artery Disease in High-Risk Cardiac Patients

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Background and Aim

To compare the effect of cardiac rehabilitation (CR) program on cardiorespiratory fitness (CRF), hand grip strength, balance, degree of physical activity between high-risk cardiac patients and participants without high-risk criteria.

Methods

Of the patients undergoing percutaneous coronary interventions for coronary artery diseases who received hospital-based CR from 2017 to 2018, we retrospectively reviewed the medical records of the patients who continued follow-up through the outpatient clinic. A total of six high-risk cardiac patients were recruited as subjects of the experimental group. Another ten CR participants without any high-risk criteria were recruited as controls. Both groups underwent 8 weeks of CR exercise training. The primary outcome was CRF parameters examined by cardiorespiratory exercise test. The secondary outcome measures were the results of hand grip strength test, Timed Up and Go (TUG) test, and the Korean version of International Physical Activity Questionnaires-Short Form (IPAQ-SF). Outcome measures were assessed before and after completion of the CR program .

Results

Exercise time (p=0.012), peak oxygen consumption (VO2peak) (p=0.019), peak minute ventilation (VEpeak) (p=0.015), anaerobic threshold (p=0.018), grip power (p=0.004), TUG result (p=0.006) improved significantly after CR in the experimental group. Exercise time (p=0.004), VO2peak (p=0.006), VEpeak (p=0.004), respiratory exchange ratio (RER, p=0.045), and anaerobic threshold (p<0.001), grip power (p=0.008), TUG result (p<0.001) also improved after the intervention in the subjects of the control group. IPAQ-SF result showed no significant improvement over time in both group (p=0.872, p=0.973, respectively). Significant time and group interaction effect was observed in the VO2peak between group (p=0.025).

Conclusions

High-risk cardiac patients who completed a supervised CR program demonstrated significant improvements in CRF parameters, balance, hand grip strength. CR should be actively considered for high-risk cardiac patients.