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**THE EFFECTS OF AEROBIC EXERCISE ON EXERCISE CARDIAC OUTPUT AND RELATED PARAMETERS IN PATIENTS WITH CHRONIC HEART FAILURE**

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**Objective** To study the effects of aerobic exercise on exercise cardiac output and related parameters in patients with chronic heart failure (CHF).

**Methods** Total of 50 CHF patients were enrolled in the study, left ventricular ejection fraction (LVEF)  $<0.49$  by Doppler echocardiography and were randomly divided into aerobic exercise group (T group) 25 cases and non-aerobic exercise group (Non-T group) 25 cases, cardiopulmonary exercise testing (CPET) were performed. The patients of T group executed the aerobic exercise prescription which exercise intensity is decided by anaerobic threshold (AT) before 10W (1 min before) of the oxygen consumption, non-T group required daily activities. After six sessions under supervised aerobic exercise training, the home-based aerobic exercise training began. CPET were reviewed 3 months later respectively.

**Results** The differences of cardiac output (CO), peak CO, peak cardiac power output (peak CPO), resting heart rate (HR), heart rate at AT (HR AT), HR peak, resting mean arterial pressure (MAP), peak MAP between baseline and 3 months later in both T group and non-T group were not statistically significant ( $p>0.05$ ), and the differences of  $\Delta$ CO,  $\Delta$ Peak CO,  $\Delta$ Peak CPO,  $\Delta$ resting heart rate (HR),  $\Delta$ HR AT,  $\Delta$ HR peak,  $\Delta$ resting mean

arterial pressure (MAP),  $\Delta$ Peak MAP between T group and non-T group were not statistically significant ( $p>0.05$ ).

**Conclusion** After 3 months of aerobic exercise, the effect on exercise cardiac output and related parameters in patients with CHF are poor.