Beneficial Effect on Blood Pressure and Lipid Profile by Programmed Exercise Training in Taiwanese Patients with Mild Hypertension

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摘要

Abstract

Mild essential hypertensive patients comprise a large portion of the hypertensive population. Previous reports have shown that moderate-intensity regular exercise training in these patients usually reduces blood pressure. By designing programmed exercise to evaluate whether it is effective in reducing blood pressure in mild hypertensive patients and also has beneficial effects on other biochemical parameters. Twenty-three mild hypertensive Taiwanese patients (resting blood pressure 139.1 +/- 11.4/99.5 +/- 8.0 mm Hg) were divided randomly into two groups: control (no exercise) and moderate-intensity exercise (average 6.4 +/- 0.7 METs). The training group exercised three times per week at the prescribed exercise intensity by using the Treadmill exercise test. Blood pressure, heart rate and other biochemical parameters were monitored regularly every 4 weeks for 12 weeks. After 12 weeks regular exercise training, the exercise group showed for significant resting blood pressure reduction. Mean maximal reduction of systolic pressure was 18 mm Hg. Significant reduction of total cholesterol, low-density lipoprotein cholesterol (LDL-C) and triglyceride were found; elevation of high-density lipoprotein cholesterol (HDL-C) was also noted. These data suggest that after 12 weeks of exercise training in mild hypertensive patients, successful reduction of blood pressure and favorable changes of lipid profile will be noted.