Abstract

Aim: To describe the behavior of heart rate and blood pressure in patients participating in stage II of the Cardiac Rehabilitation Program at the National Rehabilitation Center. Methods: 175 patients with coronary artery disease admitted in phase II of the Cardiac Rehabilitation Program at the National Rehabilitation Center between June 2009 and June 2011, and a 12-week duration. We recorded heart rate, systolic blood pressure and diastolic blood pressure before and 3 minutes after exercise; with follow-up after 2 years. Results: Out of the 175 patients, 134 (76.1%) were men, with a mean age of 59.3 years old. Heart rate after exercise showed an average increase of 7.9 b/m (13.3%). Systolic blood pressure showed an average decrease of 7.80 mmHg (6.98%) and diastolic blood pressure showed an increase of 2.25 mmHg (3.15%) in the first month, 0.71 mmHg (1.24%) in the second month, and -1.62 mmHg (-1.24%) in the third month. After 2 years we found 121 patients, 10 of them had suffered some kind of cardiac re-intervention and 2 were still waiting for a new procedure; 88 (72%) continue doing exercise. No relationship was found between behavior of heart rate and of blood pressure and the incidence of new cardiac events or re-interventions. Conclusion: This study describes changes in heart rate and blood pressure as a result of progressive exercise in a phase II cardiac rehabilitation program. We found a high percentage of adherence to exercise and a low incidence of events after 2 years.

Keywords
Cardiac rehabilitation, exercise, heart disease, high blood pressure, heart rate.