Exercise Improves Cardiac Markers in Diabetes

BY MARY ANN MOON

A 4-month exercise program of moderate intensity improved the inflammatory milieu, including markers of atherosclerosis, in overweight, sedentary diabetic patients.

The exercise did not alter body weight or insulin resistance, but it significantly improved glycemic, lipid, and cardiorespiratory factors, reported Dr. Nikolaos P. E. Kadoglou of Hippokratio General Hospital of Thessaloniki (Greece) and his associates (Diabetes Metab. 2010 Feb. 9 [doi:10.1016/j.diabet.2009.11.004]).

The researchers compared outcomes in 50 sedentary, overweight, white patients with type 2 diabetes who were aged between 50 and 65 years and whose glycemic control had failed to improve after they had followed a diet and taken oral antidiabetic drugs for at least 4 months. The study subjects were randomly assigned in equal numbers to an exercise program or a control group.

Subjects were instructed to perform 30-60 minutes of brisk walking at least 4 days per week, with no more than 2 consecutive days of inactivity.

A total of 87% of the patients in the exercise group said they achieved their target of 150 minutes per week of moderate-intensity exercise.

After 4 months, the exercise group showed significantly increased exercise capacity, reduced hemoglobin A_{1c} levels, decreased blood pressure, and lower concentrations of total and LDL cholesterol, whereas the control group did not. The exercise group also showed greater reductions in CRP and fibrinogen levels. Dr. Kadoglou reported receiving a grant from the Alexander S. Onassis Public Benefit Foundation. ■