Older overweight and obese adults with diabetes benefit from better diet and exercise

April 1 2016

Lifestyle changes that include healthier diet and routine physical exercise help older overweight and obese adults with Type 2 diabetes improve glucose control, body composition, physical function and bone quality, according to preliminary findings of an ongoing clinical trial. The six-month results of the one-year study will be presented Friday, April 1, at ENDO 2016, the annual meeting of the Endocrine Society, in Boston.

Diet and exercise, known to benefit patients with Type 2 diabetes, are controversial treatments for older adults due to concerns over frailty and age-related loss of muscle mass. No specific guidance is available for effectively modifying the lifestyle of adults with diabetes who are 65 years of age and above.

"Type 2 diabetes is highly prevalent in older adults due to the physical inactivity associated with advancing age as well as the obesity epidemic. Obesity worsens the metabolic and physical complications of aging that impair quality of life," said lead study author Alessandra Celli, research dietitian and predoctoral fellow in endocrinology at Baylor College of Medicine in Houston, Texas.

Celli and her colleagues are examining the effects of behavioral weight-loss diet therapy and exercise training in older overweight and obese adults with Type 2 diabetes. Over the past six months, they have been randomly assigning volunteers between 65 and 85 years of age to receive either intensive or limited interventions.

Participants in the intensive intervention group attend 90-minute aerobic and resistance exercise classes three times a week as well as a diet class once a week where they learn healthier eating habits.

They record all food, drink, calories and proteins consumed and can receive individual weight-loss counseling. Control group participants are not given any exercise program and receive only once-a-month diabetes educational sessions.

At the six-month mark, all study participants have preserved their lean body mass; but the intervention group's body weight and fat mass have dropped more than the control group's, and the intervention group's physical performance test and peak aerobic capacity have improved more.

Glycated hemoglobin (HbA1c), an indicator of blood glucose control, has improved more in the intervention group.

Trabecular bone score, a measure of bone texture that helps predict fracture risk, has improved among those receiving the intervention but not among the controls.

"If our results are confirmed, these encouraging findings may be used to formulate concrete recommendations about healthy lifestyle changes in older diabetic patients. Long-term studies involving a larger sample are needed to follow up on these results and examine underlying mechanisms," Celli said.

Provided by The Endocrine Society

overweight-obese-adults-diabetes.html