Prediabetes Not a Motivator for Weight Loss

VITALS

Major Finding: Weight loss did not differ significantly between those with and without prediabetes (7.0 vs. 5.6 pounds, respectively).

Data Source: A substudy of 101 individuals with prediabetes enrolled in a 12-week behavioral weight-loss program.

Disclosures: Dr. Homko disclosed that she serves on the advisory board of Abbott Diabetes Care.

BY MIRIAM E. TUCKER

FROM THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF DIABETES EDUCATORS

SAN ANTONIO – Overweight individuals who knew that they had prediabetes did not lose any more weight than did those who did not have the condition, in a preliminary analysis of 103 overweight participants in a 12-week behavioral weight-loss program.

The findings were contrary to expectations. "Our hypothesis was that individuals who perceive themselves to be at increased risk for developing diabetes would lose more weight than individuals who perceive their risk to be lower," said Carol J. Homko, Ph.D., a certified diabetes educator and registered nurse.

The data come from a secondary analysis of a larger randomized study designed to look at the effect of telemedicine on weight-loss maintenance 1 year following the weight-loss program. All 103 subjects participated in the same weekly group sessions, held at local churches and facilitated by both health care professionals (mostly registered dieticians and health psychologists) and a lay facilitator who was a member of the church. The 90-minute sessions included diet, exercise, and behavioral change counseling. Each group included 12-15 participants.

They had a mean age of 51 years (adults aged 18-75 were included) and body mass index of 35.5 kg/m^2. Nearly all were female (96%) and black (97%). At baseline, oral glucose tolerance testing revealed that 53 had impaired glucose tolerance ("prediabetes"), whereas the other 50 were normoglycemic. Those with overt diabetes were excluded. Individuals with and without prediabetes did not differ at baseline in weight, BMI, systolic blood pressure, or cholesterol level.

Risk perception was assessed with the same survey used in the Diabetes Prevention Program (Diabetes Care 2003; 26:2543-8), and included measures of personal control, worry, optimistic bias, comparative disease risk, comparative environmental risk, diabetes risk knowledge, unknown risk, and "dread risk." Across the board, there were no differences in risk perception from baseline through 12 weeks in any of those measures, said Dr. Homko of the department of medicine at Temple University, Philadelphia.

It's not clear why people who know they have prediabetes don't perceive themselves to be at greater risk for diabetes than are those without that diagnosis, but one possible explanation is that the people who chose to participate in a weight-loss program did so because they were already aware of the risks associated with excess weight and the potential impact on their health, she said in an interview.

Participants lost a mean of 6.3 pounds, and weight losses did not differ significantly between those with and without prediabetes (7.0 vs. 5.6 pounds, respectively).

Not surprisingly, weight loss correlated with progression to diabetes among the 53 with prediabetes. The 28 who reverted to normal glucose tolerance had lost an average of 11.3 pounds at 12 weeks, compared with 5.6 pounds in the 18 who remained prediabetic and 3.6 pounds in the 7 who progressed to type 2 diabetes. Those differences were statistically significant, she said.

Although the findings from this study regarding risk perception may be disappointing, the bright side is that weight loss of just 5% was associated with conversion to normal glucose tolerance in individuals with prediabetes, Dr. Homko pointed out. "There is strong evidence to suggest that weight loss and increased activity can slow the progression to type 2 diabetes," she said. ■