Diabetes & CVD: Clinical Practice Implications of ADVANCE, ACCORD & VA Trials†

Results from the ADVANCE, ACCORD and VA trials on intensive glucose blood lowering for reduction of cardiovascular disease risk in patients with type 2 diabetes have been widely interpreted as indicating that no major changes are necessary in most guidelines.

On June 8th, 2008, a panel of diabetes experts, at the American Diabetes Association's (ADA) 68th Annual Scientific Sessions, discussed the implications of these trials. The panel agreed that the studies found no significant benefit on heart disease risk from intensively lowering blood glucose levels below currently recommended guidelines in people with advanced type 2 diabetes.

The best news from the trials is that despite the nonsignificant relationship between glycemic control and cardiovascular events, both treatment groups had far fewer CVD events than predicted. This decrease was attributed to careful control of hypertension and high cholesterol. In addition, the ACCORD trial is still investigating the benefits of further lowering blood pressure and treating other lipid abnormalities common in people with diabetes. These results should be available in late 2009.

While the focus of these trials is on the effect of tight glucose control on macrovascular disease risk (stroke, MI, severe congestive heart failure, bypass surgery, amputations, and death from CVD) keeping blood glucose levels at or near the recommended ADA target has other benefits - particularly on reducing the risk of microvascular complications (retinopathy, nephropathy, neuropathy).

"One of our messages needs to be that treating diabetes is a comprehensive treatment strategy that involves blood pressure, lipid control, and aspirin therapy," said M. Sue Kirkman, M.D., ADA's vice president for clinical affairs. "The ABCs of diabetes care - management of A1C, blood pressure, and cholesterol - still apply. We have always talked about the individuality of glucose goals. Some may be candidates for lower goals, and some are candidates for higher [goals]," she said.

Rury Holman, M.D. of Oxford University and a member of ADA's panel of diabetes experts noted that these and other studies suggest that treating diabetes early is more effective and safer than starting treatment after the disease has progressed. Early control is associated with much better outcome. "The message the community needs to receive is that the guideline goals are still the same, but might be flexible in people with advanced disease," he said.

ADA will continue to explore the findings of each study and their implications. Currently, NDEP materials and messages, which call for A1C goal of "less than 7 percent for people with diabetes in general" and "individualized target levels," are appropriate and we encourage you to move forward with them. These findings suggest individualized patient care that fits the regimen to the patient.

†Adapted from ADA's online coverage of the 2008 meeting.

http://www.diabetes.org/for-media/pr-ada-statement-related-to-accord-trail-announcement-020608.jsp

http://americandiabetesnow.typepad.com/american_diabetes_associa/2008/06/hypoglycemia-an.html