Top Ten Things To Know
Intensive Glycemic Control
in the Prevention of Cardiovascular Events:
Implications of ACCORD, ADVANCE, and VADT

1. Some people with diabetes may require less strict glycemic control than previously recommended, but most should stick with the target goal of less than 7% long advised by AHA/ACC and ADA for reducing the risk of diabetes-related complications.

2. A re-examination of glycemic control guidelines in light of three recent clinical trials in people with longstanding type 2 diabetes and high cardiovascular risk that suggested no significant benefit and/or risks related to intensive glycemic control and heart disease prevention.

3. One trial – the ACCORD study – was halted early because of an increased death rate in the intensive control group, while two others, the ADVANCE and VADT studies, found no significant cardiovascular benefit (but no apparent increase in deaths).

4. Previous observational studies had found an association between higher levels of A1C and cardiovascular events. Long-term follow-up of the DCCT and UKPDS cohorts found cardiovascular benefit for people with type 1 and type 2 diabetes who underwent intensive glycemic control soon after the diagnosis of diabetes.

5. The authors say that maintaining A1C levels at or below 7 percent should remain the goal for most people with diabetes, because numerous studies provide evidence that achieving this goal substantially reduces the risk of microvascular complications, such as eye, kidney and nerve disease.

6. The long-term follow-up of the DCCT and UKPDS participants, as well as subgroup analyses from the three recent studies, also suggest a cardiovascular benefit for people without known cardiovascular disease and who have had diabetes for a relatively short time.

7. The lack of significant reduction in CVD events with intensive glycemic control should not lead clinicians to abandon the general target of A1C < 7.0%, and thereby discount the benefit of good control on what are serious and debilitating microvascular complications.

8. For those who have a history of severe hypoglycemia, limited life expectancy, advanced microvascular or macrovascular complications, extensive comorbid conditions, and those with longstanding diabetes in whom the general goal is difficult to attain despite diabetes self-management education, appropriate glucose monitoring, and effective doses of multiple glucose lowering agents including insulin, less stringent A1C goals should be considered.

9. Specific goals for people with these conditions should be determined by an individual’s health care team.

10. The ADA’s Standards of Medical Care and the AHA’s prevention guidelines call for reducing cardiovascular risk factors through blood pressure control, lipid-lowering with statin therapy, aspirin therapy, and lifestyle modifications, such as weight loss, proper nutrition and increased physical activity.


© 2009, American Heart Association. All rights reserved.