

Stroke Risk Factors Don't Explain Racial Gap

VITALS

Major Finding: Conventional risk factors accounted for only 13% of the excess incidence of stroke among blacks, whereas the addition of socioeconomic status to the analysis accounted for 23%.

Data Source: A population-based study of more than 30,000 white and black participants.

Disclosures: The study was supported by the National Institute of Neurological Disorders and Stroke. Dr. Howard reported that he has no relevant financial relationships.

BY KERRI WACHTER

SAN ANTONIO — Although large racial differences in conventional risk factors for cerebrovascular disease and socioeconomic factors exist, these differences do not fully account for the greater incidence of stroke that is seen in blacks.

In a proportional hazards me-

diation analysis, at age 45 years the addition of conventional risk factors accounted for 13% of the excess incidence among blacks, reported George Howard, Dr.P.H., at the annual International Stroke Conference. The addition of socioeconomic status to the analysis accounts for 23% of the excess incidence among blacks.

“The things that we tend to think about as largely driving the black-white differences account for less than a quarter of the differences that we’re observing,” said Dr. Howard, chair of biostatistics at the University of Alabama at Birmingham.

The findings come from the REGARDS (Reasons for Geographic and Racial Differences in Stroke) study, which involves a national cohort of 30,239 white and black participants.

“One of the great mysteries in stroke is the huge racial disparities in stroke mortality,” Dr. Howard said.

It’s estimated that blacks have a 40% greater stroke mortality rate than do whites, he noted. This difference is comparable to all blacks having hypertension and diabetes and no whites having either risk factor, Dr. Howard said. “These are massive differences in mortality.”

Study participants were selected from a commercially available list and were recruited by mail and telephone. The researchers used a computer-assisted telephone interview that includes cardiovascular disease history. This was followed by a home visit for venipuncture, ECG, and physical measures.

Participants were followed at 6-month intervals for stroke surveillance. Suspected events were adjudicated centrally. Currently, there were 352 events among 26,610 participants, who were stroke- and/or TIA-free at baseline.

In this study, the researchers performed a proportional hazards mediation analysis, estimating the excess risk of blacks, adjusting for possible factors, and evaluating how much of the excess risk is accounted for by the inclusion of these factors.

The REGARDS population is generally reflective of the U.S. population. The assessed demographic factors included age, sex, and region. Risk factors included hypertension, diabetes, atrial fibrillation, dyslipidemia, previous MI, current smoking, alcohol use, and weekly exercise. Socioeconomic factors included education and income.

In terms of risk factors, 70% of blacks had hypertension, compared with 49% of whites. Likewise, 29% of blacks had diabetes, compared with 15% of whites.

A clear age effect has been observed as well, with a 300% stroke mortality rate for blacks younger than 65 years.

In this analysis, at age 65 the addition of risk factors accounted for 31% of the excess incidence among blacks. The addition of socioeconomic status accounts for 42% of the excess incidence among blacks.

“Depending on the age, these factors account for less than half of the racial disparity in incidence. So something else is accounting for the other half,” Dr. Howard observed.

The researchers plan to look for other explanations for the racial differences seen in stroke incidence. They speculate that blacks may have more severe and/or earlier development of risk factors. There may also be nonconventional factors at play. ■

It's never too early to have the "insulin talk"

Some conversations may be hard to initiate. Take the “insulin talk,” for example. According to the American Diabetes Association, insulin is the most effective agent for lowering blood glucose.¹ It works as part of an overall diabetes treatment plan, which may include diet, exercise, and other diabetes medication. Having the “insulin talk” early may help patients accept insulin as a potential treatment option to help them achieve their A1C goals.²

The results of having a positive “insulin talk” can be impactful: in a survey, about 80% of patients with type 2 diabetes on OADs said they’d consider taking insulin if their doctor recommended it.³ So by starting the dialogue now, you can help your patients have a better understanding of insulin as an effective treatment option for lowering blood glucose.

Insulin—a chance for successful glycemic control, not a punishment for failure

Patients may focus on blaming themselves for their uncontrolled blood glucose, but you can help them focus on turning this negative mindset into positive action for managing their disease.² The United Kingdom Prospective Diabetes Study showed that by the time patients with type 2 diabetes are diagnosed, they may already have lost up to 50% of their beta-cell function, and this function may continue to decline.⁴

Because the disease is progressive, many patients with type 2 diabetes may eventually need insulin to achieve or maintain glycemic control.^{2,5} But by the time patients with type 2 diabetes are prescribed insulin, they may have had diabetes for 10 to 15 years and may already have complications due to a prolonged period of uncontrolled blood glucose.⁶ Starting insulin earlier in the disease continuum for appropriate patients can help improve glycemic control. Controlling blood glucose can reduce the risk of diabetes-related complications.^{5,6}

Treatment plans and glycemic targets should be individualized for each patient.

Insulin is indicated to help improve glycemic control in patients with diabetes mellitus.

Important Safety Information About Insulin

Possible side effects may include blood glucose levels that are too low, injection site reactions, and allergic reactions, including itching and rash. Other medications and supplements could change the way insulin works. Glucose monitoring is recommended for patients with diabetes.

THE “INSULIN TALK”

Have the talk early and as needed, to help destigmatize insulin²

- Reassure patients that using insulin doesn't mean failure and that insulin may help replace what the body is no longer adequately making
- Turn the negative mindset of failure into a positive opportunity to take personal control of A1C

Put insulin therapy in context

- Explain the benefits of maintaining blood glucose goals and the risks associated with insulin therapy
- Talk about how insulin may be worth the effort—insulin is an effective treatment option that works as part of an overall treatment plan to lower blood glucose

Identify patients' personal obstacles and help defuse the “scary” factor²

- Today's insulin injections generally cause little discomfort and are administered using small, thin needles^{2,6}
- Insulin pens make insulin more convenient to administer and are discreet²
- Insulin dose may need to be adjusted up or down over the course of treatment depending on how a patient's body responds⁵

INSULIN

IMPROVING BLOOD GLUCOSE CONTROL SHOULDN'T WAIT

Learn more at www.RethinkInsulin.com

References: 1. Nathan DM, Buse JB, Davidson MB, et al. *Diabetes Care*. 2009;32(1):193-203. 2. Polonsky WH, Jackson RA. *Clin Diabetes*. 2004;22(3):147-150. 3. Data on file, sanofi-aventis 2009. 4. Holman RR. *Diabetes Res Clin Pract*. 1998;40(suppl):S21-S25. 5. Hirsch IB, Bergenstal RM, Parkin CG, Wright E, Buse JB. *Clin Diabetes*. 2005;23(2):78-86. 6. Nathan DM. *N Engl J Med*. 2002;347(17):1342-1349.