Prophylactic Aspirin Use Varies With Race, Gender

BY SHARON WORCESTER
Southeast Bureau

NEW ORLEANS — Differential prophylactic aspirin use may contribute to racial disparities in stroke mortality, but does not appear to play a role in geographic disparities, according to findings from a cohort of patients in the ongoing Reasons for Geographic and Racial Differences in Stroke (REGARDS) study.

Nearly 17,000 adults, aged 45 years and older, participated in this segment of REGARDS, which included a computer-assisted telephone survey regarding patterns of prophylactic aspirin use, a follow-up home visit for a brief medical evaluation including blood pressure measurement and blood sampling within 2 weeks of the survey, and follow-up telephone interviews every 6 months thereafter regarding events and changes in cognitive function, Virginia Howard explained at International Stroke Conference 2008, sponsored by the American Stroke Association.

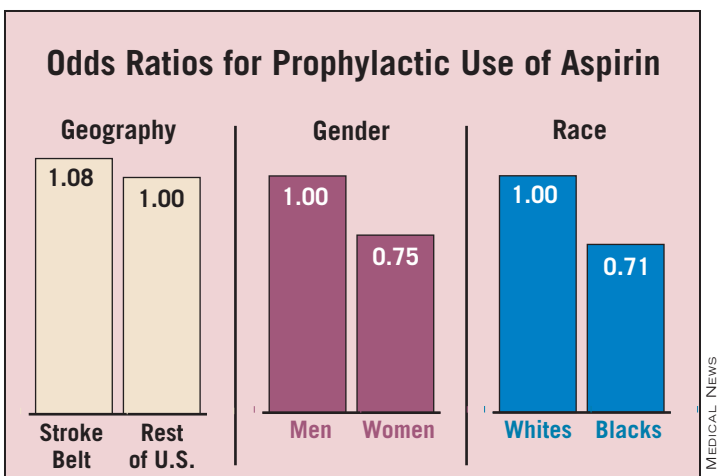
Patients who self-reported a history of heart disease, stroke, or aspirin use for pain relief, and patients in whom aspirin use could not be determined, were excluded from the study.

Overall, about 31% of participants used aspirin prophylactically, with slightly higher rates in the "stroke belt" of the southeastern United States, compared with the rest of the country. Oversampling was done in the stroke belt because of the higher stroke rates in that region, explained Ms. Howard of the University of Alabama at Birmingham.

Men were significantly more likely than women to use aspirin prophylactically, and white participants were significantly more likely than blacks to use aspirin prophylactically. (See box.) There was also a trend toward increasing use with advancing age, she said.

Aspirin use also was higher among those with higher income levels and among those with the highest educational levels (although there was little difference in usage patterns at other educational levels), as well as among smokers (particularly past smokers) and those with hypertension, diabetes, and/or dyslipidemia.

The investigators also analyzed aspirin doses, comparing use of 75 mg vs. 325 mg. No geographic or age differences were noted in regard to dose, but the use of the lower dose was more common in whites, women, and those with higher socioeconomic status. No differences in dose were noted according to risk factors.



Note: Based on data for 16,908 adults aged 45 years and older in the Reasons for Geographic and Racial Differences in Stroke study.
Source: Ms. Howard

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Overall, "we found that prophylactic aspirin use was remarkably common in this cohort," said Ms. Howard, who holds a master of science degree in public health.

"Related to our primary goals, we did find that prophylactic aspirin use was higher among whites than African Americans, so this raises the possibility that this could be contributing to racial disparities in stroke mortality."

However, counter to the investigators' hypothesis, the disparity in prophylactic aspirin use does not appear to contribute to the excess mortality in the stroke belt, as use was more common in that region compared with the rest of the nation, she said.

Ms. Howard noted that she had no financial conflicts of interest.

However, the lead investigator for this portion of the REGARD study, Dr. Stephen P. Glasser, who is also with the university, was a clinical site principal investigator for a previous trial sponsored by Bayer Healthcare. ■

Metabolic Syndrome Not a Factor in Aspirin Resistance in Chronic Tx

BY PATRICE WENDLING
Chicago Bureau

The presence of metabolic syndrome did not affect aspirin nonresponsiveness in a study of 104 patients receiving chronic aspirin therapy.

There was no significant difference in aspirin nonresponsiveness, which was defined as platelet aggregation inhibition of less than 80%, among 41 patients with metabolic syndrome and 63 patients without metabolic syndrome (12 patients, or 29%, versus 14, or 22%, respectively).

Baseline characteristics, including age (65 years versus 64 years), male gender (30 versus 40 patients), coronary artery disease (CAD) risk factors, past medical history, past smoking history, and concomitant medications, were similar between patients with metabolic syndrome and those without. All of the patients had documented CAD, Dr. Sotir Polena and colleagues at Lenox Hill Hospital in New York reported at the American Federation for Medical Research Southern Regional meeting in New Orleans.

Metabolic syndrome was defined according to the Adult Treatment Panel III criteria, which require the presence of any three of the following five traits—hyperglycemia, abdominal obesity, hypertension, hypertriglyceridemia, and reduced HDL cholesterol level. Among the metabolic syndrome group, 21 patients had more than four traits.

The majority of patients were on 325 mg/day of aspirin, although some were on 81 mg/day. "We did not find any difference on aggregation studies while comparing different doses," Dr. Polena said in an interview.

"We do not evaluate routinely for aspirin nonresponsiveness; [we evaluate] only for research purposes, but in the near future we are planning on starting a routine evaluation for all the patients undergoing a percutaneous evaluation," Dr. Polena said.

The findings are reassuring because metabolic syndrome is a well-established risk factor for CAD, and literature citations indicate that aspirin resistance may occur in as little as 5% and as much as 45% of the population.

The discrepancies in prevalence are largely due to differences in the objectives of the tests, and their sensitivity and specificity to the evaluation of platelet function. In addition, the term "aspirin resistance" has been used clinically to describe several different physiological phenomena, Dr. Polena explained. One definition is the inability of aspirin to protect patients from ischemic vascular events, while the term has also been used to describe the inability of aspirin to produce anticipated effects on one or more platelet function tests, such as the inhibition of biosynthesis of thromboxane and the response to an agonist with light transmission aggregation (LTA) testing.

Investigators at Oxford (England) University have shown that the agreement among the results of the platelet function analyzer (PFA-100), VerifyNow-ASA assays, and LTA testing remained poor among 72 patients still on low-dose aspirin therapy 1 year after first being tested, with only one patient identified as a nonresponder by all three tests (Platelets 2008;19:119-24).

A study of 191 patients with stable CAD who received secondary aspirin prophylaxis showed poor agreement among three different tests—Ivy bleeding time, collagen/epinephrine closure time, and urinary 11-dehydrothromboxane B_2 excretion levels, with only 3 patients identified as aspirin-resistant by all three tests (Thromb. Res. 2007;121:413-8).

In Dr. Polena's study, platelet aggregation inhibition was measured prior to elective catheterization by Plateletworks-ICHOR using arachidonic acid as an agonist. Helena Laboratories markets the test and supplied the materials for the study.

Dr. Polena received no funding for the study and reported no conflicts of interest. ■

Moderate Drinking Beats Quitting Post MI

BY BRUCE JANCIN
Denver Bureau

CHICAGO — Moderate drinkers who quit after an MI have worse long-term outcomes than do those who continue light to moderate drinking, Dr. John H. Lee reported at the annual meeting of the American College of Cardiology.

"This is the first study to show that moderate drinkers who continue to drink have better outcomes than moderate drinkers who quit. This finding is especially important since many who drink may quit drinking after an MI, believing it is a behavior in their best interest for health. Since continued moderate drinkers had better outcomes, it may be prudent to recommend continued moderate drinking rather than cessation," according to Dr. Lee of the Mid-America Heart Institute, Kansas City, Mo.

He presented a secondary analysis of data from the multicenter, double-blind, prospective Prevention of MI Early Remodeling (PREMIER) study, a placebo-controlled trial that failed to show benefit for a matrix metalloproteinase inhibitor. Of 2,498 participants, 362 were categorized as moderate, nonbinge drinkers prior to their MI. Afterward, 18% of the moderate drinkers quit drinking.

In a multivariate regression analysis adjusted for baseline health status and demographic variables, continued moderate drinkers were 24% less likely to experience all-cause mortality, rehospitalization, and/or angina during the first year post MI than moderate drinkers who quit. They were also 36% less likely to have angina 1 year post MI and scored significantly better on the physical component summary scale of the Short Form-12 quality of life measure.

A possible study confounder is the potential for the "sick quitter" syndrome, in which patients might have quit drinking post MI because their health was deteriorating to a greater extent. But this is an unlikely explanation, in Dr. Lee's view, since the association with worse outcomes stood up even though the multivariate analysis adjusted for renal failure, heart failure, diabetes, and other chronic diseases. ■