Taking Up Moderate Drinking Slashes CV Risk

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COLORADO SPRINGS — Former nondrinkers who initiated moderate alcohol consumption in middle age experienced a 38% reduction in cardiovascular events over 4 years, compared with continued nondrinkers, in the Atherosclerosis Risk in Communities study.

"The current American Heart Association guidelines state that moderate alcohol consumption at this level can be part of a healthy lifestyle, but caution that if you don't already drink, don't start. This research challenges that policy. A 38% lower chance of having an acute MI or stroke is extremely significant. That's a bigger effect than you'd expect with initiation of statin therapy," said Dr. Dana E. King, professor of family medicine at the Medical University of South Carolina, Charleston.

Results were presented at a conference on cardiovascular disease epidemiology and prevention sponsored by the American Heart Association.

Atherosclerosis Risk in Communities (ARIC) is an ongoing National Heart, Lung, and Blood Institute–sponsored prospective epidemiologic study of 15,792 middle-aged black and white men and women free of known cardiovascular disease and diabetes in four communities across the United States. During the first 6 years, 7,697 enrollees who were nondrinkers at baseline began moderate consumption of alcohol, defined in accord with the AHA and American Diabetes Association as not more than two drinks per day for men and one for women. An additional 0.4% of former nondrinkers began heavier drinking, Dr. King said.

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DR. KING

During the next 4 years of follow-up, the combined rate of fatal and nonfatal cardiovascular events was 6.9% among new moderate drinkers and 10.7% in the continued teetotalers. After adjustment for age, race, sex, diabetes, hypertension, hyperlipidemia, and physical activity, adoption of moderate alcohol intake remained an independent protective factor against cardiovascular events, with an associated 38% relative risk reduction.

All-cause mortality didn't differ significantly between the two groups, perhaps because of the limited number of fatalities, but there was a trend in favor of the new moderate drinkers, who showed a 29% relative risk reduction.

The new heavy drinkers displayed a nonsignificant trend for more cardiovascular events than did continued nondrinkers over the 4-year period.

The reasons why former nondrinkers in ARIC began consuming alcohol in middle age weren't assessed as part of the study. "We would presume that it was for the health benefits, but we don't know," Dr. King said in an interview.

He added that he wouldn't anticipate a formal change in AHA policy on the basis of a single study.

Yet these ARIC findings "certainly tilt the scale" in favor of physician counseling on a case-by-case basis that patients consider making alcohol part of a heart-healthy diet, provided they don't use certain medications or have a strong family or personal history of problem drinking, liver disease, or selected other health problems.

"It's a small minority of the population that gets in trouble with drinking, and perhaps we should not restrict the benefit of this healthy lifestyle choice in people who don't have a problem with alcohol," he said.

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New moderate drinkers showed a 29% relative risk reduction in mortality.

Follow-up in ARIC will continue. That's important because some possible adverse consequences of new drinking—for example, a potential increase in certain types of cancer—might take longer than 4 years to become apparent.

The ARIC alcohol adoption findings were published simultaneously with Dr. King's presentation at the annual conference (Am. J. Med. 2008;121:201-6). ■

Moderate Drinking After MI Shows Mortality Benefit

COLORADO SPRINGS — Moderate alcohol consumption following a first nonfatal acute MI appeared to protect against cardiovascular and all-cause mortality in the Physicians' Health Study.

This protective effect of moderate drinking was most robust among male physicians who had a nonanterior MI, reported Jennifer K. Pai, Sc.D., of the Harvard School of Public Health, Boston.

Numerous studies have documented a link between moderate alcohol intake and lower risk of coronary heart disease in healthy individuals. But there have been few data on the impact of drinking after a first MI.

To remedy that situation, Dr. Pai and her coinvestigators turned to the Physicians' Health Study, a landmark National Institutes of Health–sponsored prospective cohort study involving more than 20,000 male physicians begun 26 years ago, she reported at a conference sponsored by the American Heart Association.

Alcohol consumption data were available on 1,879 physicians immediately before they experienced a first nonfatal acute MI sometime after 1986. The drinking data were updated every 4 years afterward through 2004, at which point there were 317 deaths.

Physicians were classified into four groups on the basis of their pattern of alcohol use: an average of 0.1-9.9 g of alcohol per day, 10.0-29.9 g/day, 30 g or more/day, and nondrinkers. An alcoholic beverage typically contains 7-12 g of alcohol.

Upon multivariate adjustment for demographic factors, cardiovascular risk factors, and detailed information on MI severity and treatment, the relative risk of all-cause mortality in physicians who drank up to 9.9 g of alcohol/day after their MI was reduced by 34%, compared with the nondrinkers. Among physicians who averaged 10.0-29.9 g/day, the relative risk reduction was 40%. For heavier drinkers, the all-cause mortality risk reduction was 30%.

For cardiovascular mortality, the adjusted relative risk reductions were 34%, 48%, and 31%, respectively, for the lightest to heaviest drinkers, compared with nondrinkers, Dr. Pai continued.

The magnitude of the mortality benefit associated with post-MI alcohol consumption tended to be less among physicians with anterior MI than in those with MIs involving other sites. ■

Big Young Men Have Greater Risk of Atrial Fib Later in Life

COLORADO SPRINGS — Large body size in youth is associated with increased risk of atrial fibrillation in later life among men, Dr. Annika Rosengren said at a conference sponsored by the American Heart Association.

"If you were tall, or had a lot of muscles—if you were a big man—you had more risk of atrial fibrillation. And you could add to this risk further by putting on weight after age 20," according to Dr. Rosengren, professor of medicine at Sahlgrenska University Hospital, Goteborg, Sweden.

The implication of this novel finding from a large Swedish longitudinal study is that the already-high prevalence of atrial fibrillation (AF) in Western societies is going to keep climbing, and the increase won't simply be due to the graying of the population, high rate of inadequately controlled hypertension, and worsening obesity epidemic, all of which are well-recognized contributors to AF.

Size is an additional, widely unappreciated contributor to AF risk, she said in an interview: "Each successive generation is bigger in youth. People are not only growing fatter with each succeeding cohort being born, they're also getting taller and larger, independent of obesity. So expect more atrial fibrillation."

She reported on 6,903 Swedish men who were a mean of 52 years old in the early 1970s when they enrolled in the Swedish Primary Prevention Study. They were then followed until 2004, for a maximum of 34 years.

During follow-up, 18% of the men were diagnosed with AF.

The participants' body surface area at age 20 proved strongly related to subsequent risk of AF, based on a Cox regression analysis adjusted for midlife body mass index and other potential confounders. Of note, the men turned 20 during 1935-1945, a period when "obesity was virtually nonexistent in Sweden," Dr. Rosengren observed.

In the adjusted regression analysis, men in the second quartile of body surface area at age 20 had a 42% greater risk of later developing AF as did men in the lowest quartile. Men in the third quartile had a 58% increase in risk, while those in the top quartile for body surface had a 200% greater risk. Body weight at age 20 showed a virtually identical association with subsequent AF.

"The mechanism is probably that if you're big, whatever the cause, there's a high likelihood of having large atria—and large atria are more prone to develop atrial fibrillation," the physician explained.

In nature, AF doesn't occur in small species of animals but is common in giraffes and other large creatures, she added.

Weight gain between age 20 and midlife was also independently associated with increased AF risk in the Swedish men.

A 5%-15% bump in body weight over the decades was associated with a 13% greater rate of AF, compared with no change in weight. A 16%-35% weight gain was associated with a 33% increase in AF rate, while a more than 35% increase in weight was followed by a 61% increase in risk. ■