**PAD Deaths Reduced With Statins, Aspirin, Beta-Blockers**

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**DALLAS** — Treatment with each of four drug classes—statins, β-blockers, aspirin, and ACE inhibitors—was associated with significant cuts in mortality in patients with peripheral artery disease during an average follow-up of 8 years, Dr. Harm H. Ferenga reported at the annual scientific sessions of the American Heart Association.

“Patients with peripheral artery disease have, by definition, coronary artery disease. A patient with proven coronary artery disease should get these drugs, commented Dr. Don Poldermans, a coinvestigator on the study and professor of cardiology at Erasmus University, Rotterdam, the Netherlands. “You need to find a reason not to give these drugs to patients with peripheral artery disease,” he said.

The analysis reviewed 2,420 consecutive patients with peripheral artery disease seen at Erasmus University during 1983-2004. Their average age was 64 years, and 72% were men. The average ankle-brachial index was 0.98. At baseline, 19% of the patients were treated with a statin, 23% were treated with a β-blocker, 22% were treated with aspirin, and 26% received an ACE inhibitor.

During follow-up, 1,067 (44%) of the patients died, according to data from a national registry. The investigators performed a multivariate analysis to determine the relative risk for all-cause mortality associated with various clinical measures and with drug treatment.

The most powerful clinical association for death was renal failure, which increased mortality by 3.3 times. Hyper- tension and cholesterol levels boosted mortality by 7.7%, a history of heart failure was linked with a 73% increased risk, and age of more than 70 years was linked with a 5.7% increased risk of death.

Treatment with a statin at baseline was linked with a 54% reduced risk of death. Treatment with a β-blocker was associated with a 32% reduced risk, aspirin was linked with a 28% reduced risk, and treatment with an ACE inhibitor was linked with a 20% reduced risk of death. All of these associations were statistically significant, said Dr. Ferenga, an Erasmus University physician.

Treatment at baseline with a calcium channel blocker, warfarin (Coumadin), a diuretic, or a nitrate was not significantly associated with a reduced risk of death.

So far, the analysis has not looked for possible interactions between treatment with the statins, blockers, aspirin, and ACE inhibitors.

During the period studied, use of all four drug classes increased. During 1983-1987, statins, β-blockers, aspirin, and ACE inhibitors were used by 13%, 17%, 15%, and 12% of all patients, respectively. During 2000-2004, the prescription rates for these drugs were 32%, 40%, 27%, and 30%, respectively, said Dr. Ferenga.

**Tooth Loss Linked to CHD**

Loss of permanent teeth may raise the risk for coronary heart disease, and the risk could increase as the extent of tooth loss worsens, reported Catherine A. Okoro and her associates at the Centers for Disease Control and Prevention, Atlanta.

Epidemiologic studies have shown a link between coronary heart disease (CHD) and tooth loss due to periodontal or other oral disease, but other studies have cast doubt on this association. Ms. Okoro and her colleagues assessed tooth loss and CHD prevalence using data from a surveillance study involving 41,891 people aged 40-79 years at five sites across the US population.

The rate of CHD was 4.7% in subjects who had all their natural teeth but was 5.7% in those who were missing 1-1 teeth, 7.5% in those missing 2-3 teeth, and 8.5% in those missing all of their teeth due to tooth decay or gum disease.

In addition, patients with CHD were more likely to be missing several teeth (29.4%) or all of their teeth (23.6%) than were people who didn’t have CHD (17.6% and 10.1%, respectively). Like other local infections, periodontal infections are thought to raise inflammation, which can impair the function of inflammatory mediators and thus promote inflammation-associated atherosclerotic processes, the investigators said (Am. J. Preventive Med. doi:10.1016/j.amepre.2005.07.006).

This study was not designed to identify any possible causal links between tooth loss and CHD. It is possible that the findings simply indicate that people who are more health conscious have better oral health and lower CHD risk, they noted.

**Diesel Fumes Harm Vascular Function**

Inhaling diesel exhaust impairs two complementary aspects of vascular function: endothelial-dependent and endothelium-independent vasodilators, but it had no effect on the vasomotor response to a calcium channel antagonist. This suggests that the mechanism of vascular dysfunction involved increased consumption of nitrogen oxides, the investigators said.

**Binge Drinking Impairs MI Survivors**

Binge drinking doubles short-term mortality in patients who have survived an MI, regardless of their usual level of drinking and the type of alcohol they consume, reported Dr. Kenneth J. Mukamal of Beth Israel Deaconess Medical Center, Boston, and his associates.

“The researchers assessed mortality in a subset of patients who had participated in a multicenter cohort study on the causes of MI. These patients were later interviewed about their drinking habits and other factors while they were hospitalized for an initial MI between 1989 and 1994. A total of 318 of the patients died during a median of 3.8 years of follow-up. As expected, light and moderate drinking were found to protect against cardiovascular mortality and total mortality, as has been reported in previous studies, the investigators said (Circulation 2005;112:1839-45).

In contrast, binge drinking (consuming 3 or more drinks in 1-2 hours) was linked to a 20% increase in cardiovascular mortality and total mortality. This association held true for subjects who binge on beer, wine, liquor, or any combination of these drinks. It also persisted after the data were adjusted to account for differences in infant size and sex, smoking status, and intake of coffee, tea, marijuana, and cocaine. There also appeared to be a dose-response relationship, with mortality risk rising as the frequency of binge drinking episodes increased. Binge drinking raised mortality among people who customarily were light drinkers as well as those who drank more heavily. This suggests that any potential benefits of moderate drinking must be weighed against the increased risk of ‘occasional binge drinking.’” Dr. Mukamal and associates said. “In our analyses, the apparent benefit associated with otherwise light drinking managed care system serving about 400,000 patients. Full outpatient records of medical, pharmacy, laboratory, and radiology information were stored electronically, allowing for ‘current and comprehensive analysis,’ according to the researchers. Mean follow-up was slightly more than 17 months. Fasting lipid profiles were screened in 95% (86/90) of the study group in the algorithmic approach interacted regularly with a pharmacist-manager who collected data, monitored medication and laboratory compliance while making treatment plan adjustments, and kept the responsible primary care physician notified. Lipid control goals were those defined by the National Cholesterol Education Program Adult Treatment Panel III guidelines.

“Our current study demonstrates that improvements in lipid control and statin usage, and attainment of national lipid goals, are highly achievable in a PAD population that is treated in a disease management fashion,” the researchers stated.