CLINICAL CAPSULES

Statins Reduce Sepsis Risk

Statins may diminish the risk of sepsis in people with cardiovascular disease, according to the results of a large observational study.

Dr. Daniel G. Hackam of the University of Toronto and his colleagues found that the risk of sepsis was reduced by 19% in patients over the age of 65 years who used statins, compared with those who did not use the drugs (Lancet DOI:10.1016/S0140-6736[06]68041-0, published Jan. 25, 2006).

Statins, widely used as lipid-lowering agents, also exhibit anti-inflammatory and antioxidant effects and can improve endothelial function and modulate cellular immunity, all of which may help ward off the severe effects of sepsis, the authors wrote.

The researchers identified 173,410 patients at high risk of sepsis. The selection criteria were patients over 65 years who had been treated in a hospital in Ontario, Canada, between 1997 and 2002 for an acute cardiac event, ischemic stroke, or revascularization. Propensity-based matching produced a final cohort of 69,168 patients, of whom 34,584 were statin users and 34,584 were not.

Monitoring for each patient began on their index date and continued until the patient died or was admitted to the hospital for sepsis, or until the end of the study, if there were no events. In all, there were 1,218 cases of sepsis, of which 551 were in statin-using patients and 667 were in the nonstatin-using control group, a statistically significant difference. The development of severe or fatal sepsis was also less likely in the statin-using group, the authors noted.

Dr. Hackam and his colleagues recommended that statin treatment for patients with major infections who are already on the drug should be continued, although they should be monitored closely for potential toxic effects. Statins should be considered for patients with a high risk for sepsis, especially those with cardiovascular disease, they wrote.

Waist Size Predicts CVD Risk

Waist circumference of at least 35 inches correlated with major cardiovascular and metabolic risk factors in women, reported Dr. Lori Mosca, director of preventive cardiology at New York–Presbyterian Hospital/Columbia University Medical Center, and her associates.

This finding suggests that measuring the waist can serve as a simple way to identify women at risk for cardiovascular events "who might benefit from further evaluation and intervention," the researchers said (J. Women's Health 2006;15:24-34).

They conducted a free, 1-day cardiovascular disease (CVD) screening program in 12 cities across the country; 6,938 women aged 18-93 years participated, and more than half were racial or ethnic minorities. The women were assessed for waist size, blood pressure, body mass index, and cholesterol and glucose levels.

Waist circumference of at least 35 inches was found in 52%; these women were significantly more likely than those with smaller waists to have high blood pressure, hypercholesterolemia, low HDL cholesterol, and impaired fasting glucose, even after the data were controlled for race and ethnicity, education level, and family history of CVD.

Thus a single, simple waist measurement, even if done by the woman herself, can be valuable in identifying those "who have a clustering of risk factors known to be synergistic with respect to CVD risk," Dr. Mosca and her associates said.

High Fish Intake Cuts CHD Risk

For reducing the risk of coronary heart disease, a diet high in fish is better than a diet with a modest amount of fish, reported Dr. Hiroyasu Iso of the University of Tsukuba, Ibaraki-ken, Japan, and associates.

The investigators conducted a prospective study of healthy Japanese men (19,985) and women (21,593) aged 40-59 years at enrollment during 1990-1992. By follow-up in 2001, there had been 258 incident cases of CHD, including 198 definite MIs, 23 probable MIs, and 37 sudden cardiac deaths. This included 62 fatal and 196 nonfatal cardiac events (Circulation 2006;113:195-202).

CHD risk was 40% lower among people with the highest intake of fish (eight servings per week, or 180 g/day) than among those with the lowest intake (once per week, or 23 g/day). "This implies that a high intake of fish can further reduce the risk of initial coronary heart disease events compared with a moderate fish intake, which has never been tested by previous observational studies in Western countries," Dr. Iso and associates said.

The reduced risk was confined to nonfatal events only, but that may have been because the low number of fatal MIs (62) and sudden cardiac deaths (37) failed to provide enough statistical power to detect an association with those types of events, they added.

—Mary Ann Moon and Giancarlo La Giorgia