High Risk of Peripheral Artery Disease in HIV

September 17, 2007 By Tim Horn

Not only do HIV-positive people face an increased risk of heart attacks and strokes due to clogging of the major blood vessels, but they may also be more likely to suffer from peripheral artery disease (PAD), which can affect other parts of the body. The new findings—the first to look at rates of PAD in HIV-positive people—were reported today at the 47th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) in Chicago.

In PAD, blood vessels carrying oxygen-rich blood to the kidneys, stomach, arms, legs or feet become restricted by arteriosclerosis—thickening and hardening of the artery walls caused by excess cholesterol. Left untreated, PAD can cause claudication—cramping, fatigue and discomfort in the legs—and potentially serious kidney damage.

The study involved 92 randomly selected HIV-positive patients receiving care at the University Hospital in Lausanne, Switzerland. Approximately 24 percent of the patients enrolled in the study were women, and the average age was nearly 50 years. More than 60 percent of those enrolled were cigarette smokers. Fourteen of the patients reported symptoms consistent with claudication at the time of their evaluation.

To look for PAD, the researchers determined each patient’s ankle-brachial index—a measure of the blood pressure in the arteries supplying the legs compared with the blood pressure in the arms. Ultrasound scans of the large leg arteries were also conducted.

PAD was detected in 19 patients—almost 21 percent of those enrolled in the study. Among the 16 patients with PAD who agreed to have ultrasounds performed, all had evidence of arteriosclerosis in the major arteries of their legs. Smoking, older age, a diabetes diagnosis, high cholesterol levels and low CD4 cell counts were found to be significant predictors of PAD in the HIV-positive patients studied.

While the study did not include HIV-negative people for comparison purposes, the authors note that the prevalence of PAD is approximately 3 percent among 60-year-olds in the general population. The prevalence of PAD among the HIV-positive patients in this study, the authors note, “is high and higher than expected.”
The authors refrained from making any general recommendations regarding PAD screening or treatment in HIV-positive people. However, they stressed that larger studies are needed to more precisely define PAD risk factors and to evaluate whether PAD is linked to an increased risk of PAD-related health problems in HIV-positive people.

Source: