Drug Monitor

ONLINE EDITION

HIV Treatment, Alcohol, and Ethnicity

As dyslipidemia has been reported in 40% to 80% of patients treated with highly active antiretroviral therapy (HAART) for HIV, it would be helpful to identify risk factors for HAART-related dyslipidemia. Such knowledge could enable clinicians to tailor their HAART regimens appropriately and take preventive action against cardiovascular disease in at-risk patients.

With these factors in mind, researchers from Florida International University and University of Miami, both in Miami, conducted a longitudinal study to determine whether ethnicity and hazardous alcohol consumption are risk factors for dyslipidemia in patients receiving HAART. They recruited participants between 18 and 55 years of age who were about to begin the therapy, and they used self-reports to determine the participants' ethnicity and status as hazardous drinkers (defined as women who have more than seven drinks per week or men who have more than 14 drinks per week) or nonhazardous drinkers. The researchers measured the participants' triglyceride, high-density lipoprotein (HDL), low-density lipoprotein (LDL), and total cholesterol levels both before and six months into the therapy, and they recorded which participants received HAART that included protease inhibitors (PIs).

Of the 164 participants, 51% were black, 39% were Hispanic, and 10% were white, while 54% were hazardous drinkers and 46% were not. At baseline, Hispanic and white participants had a greater risk of hypertriglyceridemia than black participants, and Hispanic participants were three times more likely than black participants to have HDL levels lower than 40 mg/dL. Hazardous drinkers had lower baseline total cholesterol and LDL levels than nonhazardous drinkers. After six months of HAART, average total cholesterol levels increased 11% in white participants, 6% in Hispanic participants, and 4% in black participants; average triglyceride levels increased 40% in white participants, 24% in Hispanic participants, and 9% in black participants; and average LDL levels increased 10% in white and Hispanic participants and 4% in black participants. Hazardous drinking was associated with increased lipids in each ethnic group—especially Hispanic participants—at six months.

The researchers conclude that both hazardous drinking and being white or Hispanic were risk factors for lipoprotein disturbances in the study sample. They call for "caution when prescribing HAART regimens containing PIs for Hispanic and [white] hazardous alcohol users without previous alcohol use diagnosis and counseling."

Source: *J Assoc Nurses AIDS Care.* 2009;20(3):176–183. doi:10.1016/j.jana.2009.02.004.

Catheter Ablation vs. Antiarrhythmic Drugs

Nonrandomized research has indicated that patients with atrial fibrillation (AF) have better survival rates when they receive catheter ablation therapy as opposed to antiarrhythmic drug (AAD) therapy. But what do the results of randomized, controlled trials indicate?

To find out, researchers from University of Athens, Athens, Greece and University of Leipzig, Leipzig, Germany conducted a meta-analysis of eight such trials. These trials had a combined population of 930 patients with AF, 486 of whom received ablation therapy and 444 of whom received ADD therapy. The trials' mean patient ages ranged from 51 to 65 years. Seven trials included patients with paroxysmal or persistent AF, and one trial included patients with chronic AF. Seven of the trials had a one-year follow-up.

The researchers found no significant differences between the trials' combined ablation and ADD treatment groups with regard to mortality rates or rates of stroke or transient ischemic attack. There were three deaths in the ablation group and four in the AAD group, indicating a risk difference of –0.003, and there were three strokes or transient ischemic attacks in the ablation group and one in the AAD group, indicating a risk difference of 0.004. Although follow-up data was missing on three patients, no pattern of mortality among these patients could have led to a difference in mortality rates, the researchers say.

They note that their findings appear to contradict both the results of previous research and the "expected effect" of catheter ablation, which is a potentially curative treatment for AF. One explanation, they say, is the fact that their patient population was relatively young and had a low prevalence of structural heart disease—and, thus, a high expected rate of survival. They also suggest that the "relatively short follow-up of 12 months" may have affected the results, as previous research suggests that ablation's survival benefits become evident after one year.

Source: *Am Heart J.* 2009;158(1):15–20. doi:10.1016/j.ahj.2009.05.012.