Switch From Abacavir to Tenofovir Improves Cholesterol Levels

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People on a regimen containing abacavir saw their cholesterol drop quickly and significantly when they switched to a similar regimen containing tenofovir. What's more, people who switched expressed greater satisfaction with their new regimen, said the authors of a study presented September 14 at the 50th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) in Boston.

Cardiovascular disease (CVD) is an increasing concern for people with HIV. The rates of heart attacks and other health conditions related to CVD are on the rise. Early signs of CVD include changes to the levels of fats—also known as lipids—in the blood, including: total cholesterol, triglycerides, low-density lipoprotein or LDL (the "bad" cholesterol) and high-density lipoprotein or HDL (the "good" cholesterol). Some previous studies have suggested that regimens containing abacavir might contribute to adverse changes in blood lipids, but data haven't been consistent.

To test this theory, Graham Moyle, MD, from the Chelsea and Westminster Hospital in London, and his colleagues enrolled 159 HIV-positive people with high cholesterol who had been taking Sustiva (efavirenz) plus Epzicom (abacavir plus lamivudine) for at least six months. Moyle's team switched half of the group right away to Atripla (efavirenz plus tenofovir and emtricitabine). They kept the other half on the old regimen for 12 weeks and then switched them to Atripla. The study's primary aim was to measure the change in total cholesterol before and after the treatment switch.

The two groups were very similar in all characteristics. Roughly 75 percent were male, the average age was 42, and about one third were black. The majority of the participants had a total cholesterol level between 240 and 260. By contrast, the American Heart Association recommends that total cholesterol remain under 200.

Both groups—whether they switched to Atripla right away or delayed their switch—maintained good control of their virus and their CD4 counts. Moreover, the rates of discontinuations and side effects were similar between the two groups.

Switching to Atripla, however, resulted in substantial decreases in total cholesterol, LDL and triglycerides. During the 12-week period when the delayed-switch group remained on Epzicom, their total cholesterol, LDL and triglycerides remained essentially unchanged, while all of those values dropped suddenly after they switched to Atripla. People who switched immediately saw

similar drops.

Moyle’s team also asked people about the ease of their regimen and their satisfaction with their regimen. Overall, most people felt their regimen was “very easy,” and they were “very satisfied” with their regimens before switching. On average, however, the number who reported being “very satisfied” with their regimen increased significantly after switching to Atripla.
