HIV-Positive People on Abacavir Don’t Have More Inflammation

July 1, 2010

HIV-positive women and men do not appear to have increased signs of cardiovascular inflammation when they take abacavir (found in Ziagen, Epzicom and Trizivir), according to a study published online June 25 in the journal *AIDS*. These results stand in contrast to a couple of previous studies that found not only higher levels of inflammatory proteins in abacavir takers, but also an increased risk for heart attacks.

Members of the HIV community were surprised when the Data Collection on Adverse Events of Anti-HIV Drugs (D:A:D) study reported in February 2008 that people using abacavir had about a 90 percent increase in the likelihood of having a heart attack. A subsequent analysis of data from the Strategies for Management of Anti-Retroviral Therapy (SMART) study confirmed these findings.

The SMART and D:A:D studies also found that abacavir was associated not only with an increased heart attack risk, but also with an increase in blood levels of proteins that are often associated with cellular inflammation in the circulatory system, and an increased risk of cardiovascular disease (CVD). Contrary to D:A:D and SMART, however, several subsequent studies from large cohorts found no consistent increase in either heart attack risk or inflammatory protein levels in abacavir takers.

To explore this matter, Frank Palella, MD, from Northwestern University Feinberg School of Medicine in Chicago, and his colleagues analyzed data from two large U.S. studies: the Women’s HIV Interagency Cohort Study (WHIS) and the Multicenter AIDS Cohort study (MACS). In all, Palella’s team looked at blood levels of inflammatory proteins in 1,508 women and men before and after they started taking potent combination ARV therapy. Though none of these people were on combination therapy at the first study visit included in the analysis, some were taking one or two ARV drugs before beginning combination therapy.

Half the group started a regimen that included abacavir, and half did not include abacavir in their regimen. The two groups were matched based on a number of factors so as to ensure that they were as similar as possible. The study looked for changes in three inflammatory proteins—interleukin-6 (IL-6), high sensitivity C-reactive protein (hsCRP) and D-dimer—but not heart attacks.

Palella and his colleagues found abacavir was not associated with differences in inflammatory

protein levels. This was true whether people were initiating ARV therapy for the first time, or had taken it at some point in the past.

The authors caution that, “This work should not be interpreted as either refuting or supporting hypotheses suggesting associations between recent use of abacavir (or any other [ARV drug] for that matter) and CVD in general or specific CVD endpoints.

“However, our work does suggest that, if recent [abacavir] use is indeed associated with increase risk for adverse cardiovascular events, system inflammation is not likely the sole or primary means by which its effects are mediated,” they conclude.

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http://beta.docker.poz.com/article/hiv-abacavir-heart-18676-5531