



Today's HIV Meds Are Not Linked to High Blood Pressure

A large, ongoing study of people with HIV found that only a couple of older antiretrovirals were linked to high blood pressure.

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The antiretrovirals (ARVs) in common usage today are not associated with an increased risk of high blood pressure, [aidsmap](#) reports.

Publishing their findings in *HIV Medicine*, researchers from the D:A:D study, a large, ongoing multi-cohort observational study of people with HIV, updated their 2005 paper in which they were unable to identify a clear link between ARVs and high blood pressure.

For this new analysis, the researchers analyzed data on 33,278 HIV-positive study participants who were in medical care for the virus in Europe, Australia and the United States between 1999 and 2013. They looked for a relationship between hypertension diagnoses and 18 ARVs as well as various other risk factors.

A high blood pressure diagnosis was defined as developing blood pressure of 140 over 90, receiving a blood pressure medication or both.

Three out of four of the participants were male, and 44 percent of the participants overall were men who likely contracted the virus through sex with another man. The median age upon entry into the study was 38 years old. About half of the study members were white and one in five had received an AIDS diagnosis. The median CD4 count was 429. Almost 40 percent had a fully suppressed viral load and 68 percent had received ARVs.

As for cardiovascular risk factors, 60 percent had a history of smoking, 16 percent had a body mass index (BMI) over 26 (between 25 and 29.5 indicates overweight), 18 percent had lipodystrophy (the irregular distribution of body fat associated with some of the earliest ARVs) 4 percent were on medication to lower their blood lipids and 2 percent had diabetes.

During a cumulative 223,000 years of follow-up, 7,636 members of the study (23 percent) developed high blood pressure, for a rate of 3.42 diagnoses per 100 cumulative years of follow-up.

When the researchers analyzed the data without adjusting for any non-ARV factors associated with high blood pressure, they found that all the HIV medications were linked to the condition except for Norvir (ritonavir)-boosted Prezista (darunavir) and Emtriva (emtricitabine).

Then the study authors adjusted for demographic risk factors for high blood pressure and found that the only ARVs still linked to the condition were Ziagen (abacavir), Viramune (nevirapine), Norvir and Norvir-boosted Crixivan (indinavir).

Finally, after the investigators adjusted the data to account for differences in metabolic risk factors, Ziagen and Norvir were no longer associated with high blood pressure. Each five years of exposure to Norvir-boosted Crixivan was associated with a 12 percent increase in the risk of high blood pressure, and Viramune was associated with an 8 percent increase per five years of exposure.

The most prominent risk factors for high blood pressure included being male, being older, being Black, engaging in injection drug use and having an AIDS diagnosis, diabetes, high blood lipids, lipodystrophy, obesity and impaired kidney function.

To read the aidsmap article, [click here](#).

To read the study abstract, [click here](#).