Who’s at Risk of Weight Gain?

Newer drug classes are tied to a higher risk of weight gain, which is more likely to occur among Black women in particular.

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People typically gain weight after starting antiretroviral (ARV) treatment—and not necessarily because of improving health.

Researchers conducted a new pooled analysis of weight trends in eight randomized controlled clinical trials of 5,680 people starting their first HIV regimen between 2003 and 2015.

Through two years of treatment, the group as a whole gained a median of 4.4 pounds. The proportions of the participants who experienced at least a 3%, 5% and 10% increase in weight were 49%, 37% and 17%, respectively. Over time, being overweight or obese became increasingly common.

Being female, obese and younger than 50 years old when starting ARVs were all associated with greater weight gain. When the results were broken down by race and sex, Black women had the greatest average weight gain, followed by Black men.

Looking at the third ARV in individuals’ HIV regimens, the investigators found that integrase inhibitors were associated with an average weight gain of 7.1 pounds, non-nucleoside reverse transcriptase inhibitors (NNRTIs) with an average gain of 4.3 pounds and protease inhibitors with an average gain of 3.8 pounds.

As for specific integrase inhibitors, bictegravir and dolutegravir were each associated with an average weight gain of about 9.0 pounds, while cobicistat-boosted elvitegravir was tied to an average gain of 6.0 pounds.

With NNRTIs, participants taking rilpivirine gained an average of 6.6 pounds, while those taking efavirenz put on an average of 3.8 pounds.

And for those taking nucleoside/nucleotide reverse transcriptase inhibitors, the average weight gain was 9.4 pounds for tenofovir alafenamide (TAF, the newer form of tenofovir), 6.8 pounds for abacavir and 4.6 pounds for tenofovir disoproxil fumarate (TDF, the older form of tenofovir).

A separate analysis, led by Andrew Hill, PhD, of the University of Liverpool, reached similar

conclusions.

“There are several risk factors for weight gain and clinical obesity: starting treatment with dolutegravir or bictegravir, use of TAF/[emtricitabine], Black race and female sex,” Hill said. “Now we need to predict the consequences of obesity on the risk of diabetes, heart attacks, cancer and adverse pregnancy outcomes.”

For brand names and components of antiretroviral medications, see poz.com/drug_charts/hiv-medications.

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