Baseline Viral Load, Time to Suppression Dictate Rebound Risk

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Having a higher viral load when beginning antiretroviral (ARV) treatment and taking longer to fully suppress the virus can each increase the risk of a viral rebound among people with HIV, aidsmap reports. A representative from the Mortimer Market Centre in London presented findings from a study of people with HIV starting first-line treatment at the 14th European AIDS Conference in Brussels.

The study drew a sample from the UK Collaborative HIV Cohort of 8,184 treatment-naive people with HIV, all of whom began treatment after 2000. The sample excluded anyone who began ARVs within three months of contracting the virus or who experienced AIDS-defining illnesses within three months of beginning treatment.

Those who began treatment with a viral load of less than 100,000 achieved a fully suppressed viral load at a rate of 92 percent. The rate was 91 percent for those who began treatment with a viral load of 100,000 to 500,000 and 87 percent for those who began with a viral load of more than 500,000.

The researchers conducted an analysis of the 7,475 participants in the group (91 percent) who achieved a fully suppressed viral load during their first ARV regimen. During a median follow-up period of 3.5 years, 1,298 participants (17 percent) in this group experienced viral rebound, which the study defined as having two consecutive viral load tests of more than 50. Those who began treatment with a viral load of 100,000 to 500,000 were 34 percent more likely to experience a rebound than those who began treatment with a viral load between 10,000 and 100,000. Those who began with a viral load of more than 500,000 were 67 percent more likely to experience a rebound than the same group.

Forty-two percent of the group that achieved full viral suppression during their first HIV treatment regimen took less than three months to reach a fully suppressed viral load, while 40 percent took three to six months, 15 percent took six to 12 months and 5 percent more than a year. Those who took six to 12 months to achieve a fully suppressed viral load were 47 percent more likely to experience viral rebound than those who took just three to six months to achieve full viral suppression. Those who took longer than a year were 2.5 times more likely to experience viral rebound than the same group.

To read the aidsmap story, click here.

To read the study abstract, click here.
