Low Vitamin D Is Linked to Poor HIV Treatment Outcomes

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There is an apparent association between low vitamin D levels and an elevated risk of HIV disease progression among people beginning treatment for the virus, aidsmap reports. Publishing their findings in The Journal of Infectious Diseases, investigators studied members of the PEARL trial in eight low- and middle-income countries, as well as in the United States.

The HIV-positive study participants had progressed to the World Health Organization's stage 3/4 of HIV disease within 96 weeks of starting on antiretrovirals (ARVs), or they had experienced virologic failure (two consecutive viral loads over 1,000 16 weeks after starting ARVs), or they had experienced immunologic failure (CD4s dropping below 100 after 48 weeks of ARVs). The researchers compared these participants to randomly selected HIV-positive people to determine if their vitamin D levels when they started taking HIV therapy were linked to a raised risk of worse clinical outcomes.

Forty-nine percent of the participants had low vitamin D upon starting HIV treatment. Low vitamin D at this point was linked to a 2.13-fold increased risk of clinical disease progression and a 2.13-fold increased risk of virologic failure. Some evidence suggested that low vitamin D may also be linked to a worse CD4 response to ARVs, although there was not enough evidence to prove the association.

The researchers believe this research supports the need for future study into whether supplementing for vitamin D affects outcomes of HIV treatment. They say that there is a biologic plausibility that low vitamin D would increase the risk of worse clinical outcomes during HIV treatment.

To read the aidsmap story, click here.

To read the study abstract, click here.

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