Inflammation May Lead to Diabetes in People on HIV Meds

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There is a link between low-level elevations of markers that indicate systemic inflammation and the development of type 2 diabetes among HIV-positive people taking antiretrovirals (ARVs), aidsmap reports. Publishing their findings in the Journal of Acquired Immune Deficiency Syndromes, researchers conducted a retrospective analysis of the relationship between baseline levels of high sensitivity C-reactive protein (hsCRP) and interleukin-6 (IL-6) and new type 2 diabetes diagnoses among approximately 3,700 people in the SMART and ESPRIT HIV treatment studies. The members of the study cohort were all taking continuous ARVs without any adjunct therapy.

During an average 4.6 years of follow-up, 137 people were diagnosed with type 2 diabetes, for a rate of 8.18 per 1,000 person-years.

The group that developed diabetes had significantly higher median baseline levels of the two inflammatory markers when compared with the group that did not develop diabetes: The respective hsCRP levels were 4.91 and 2.29 micrograms per milliliter; the respective IL-6 levels were 3.45 vs. 2.50 pictograms per mL.

Higher body mass index, older age, coinfection with hepatitis B or hepatitis C virus and the use of lipid-lowering medication were all linked with the diagnosis of diabetes.

The study's authors concluded that low-grade systemic inflammation is an underlying factor in the development of type 2 diabetes among HIV-positive people taking ARVs.

To read the aidsmap story, click here.

To read the study abstract, click here.