HIV Is Independently Associated With Peripheral Artery Disease

The condition is a manifestation of cardiovascular disease.

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People living with HIV have a higher risk peripheral artery disease, which is a manifestation of cardiovascular disease, than the general population.

Andreas D. Knudsen, of Rigshospitalet in Copenhagen, Denmark, announced findings from a recent analysis of peripheral artery disease risk factors among HIV-positive individuals at the 2018 Conference on Retroviruses and Opportunistic Infections (CROI) in Boston.

Knudsen and his colleagues analyzed data from 908 people with HIV who were recruited from the Copenhagen comorbidity infection (COCOMO) study and compared them with 11,106 HIV-negative controls matched for sex and age. All study members were age 40 or older.

Participants received tests for blood pressure, lipids, glucose and eGFR (an indication of kidney function) as well as an hsCRP test (a cardiovascular disease screening tool) and also provided information on their smoking and medication history.

The study authors defined peripheral artery disease as an Ankle-brachial index test result of 0.9 or below.

After adjusting the data to account for differences between the two study groups according to age, sex, smoking status, abnormal lipids, diabetes, hsCRP and high blood pressure, the researchers found that HIV was associated with a 1.7-fold increased risk of peripheral artery disease.

Other factors independently associated with peripheral artery disease, regardless of HIV status, included age, being female, smoking status, high blood pressure, intermittent claudication (obstruction of the arteries) and kidney function.

Among those in the HIV group, various factors were not apparently associated with peripheral artery disease, including having an AIDS diagnosis, lowest-ever CD4 count, current CD4 count, CD4 to CD8 ratio, hepatitis C virus (HCV) coinfection, antiretroviral treatment or length of infection with the virus.

The researchers do not know the precise biological mechanisms that drive the higher risk of peripheral artery disease in people with HIV. Until more research can be conducted to answer related questions, the study authors stress the importance of focusing on modifiable traditional risk factors.

To read the conference abstract, click here.
