



A Cardiovascular System on Fire

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The first data from the much anticipated REPRIEVE trial on statin medications for people with HIV are out, and they suggest that a fire is brewing in the vascular system of about half of people living with HIV.

The study, published in JAMA Network Open, details the heart health of 755 people living with HIV who were on antiretroviral treatment with an undetectable viral load as they began the trial. None had started taking statins, cholesterol-lowering medications used to prevent cardiovascular disease. According to traditional screening guidelines from the American Heart Association and the American College of Cardiology, all the participants had low to medium risk for atherosclerotic cardiovascular disease—that is, abnormalities in the arteries that can lead to heart attacks and strokes.

The participants received a test of cardiovascular function called coronary computed tomography angiography and had blood drawn to look for inflammatory markers and the amount of arterial plaque—buildup of fats, cholesterol and other substances that harden the arteries and impede the flow of blood.

Nearly half of the participants (49%) had some level of plaque in their arteries—more than the traditional screening test would have suggested. And 7% of the participants had enough plaque to obstruct blood flow. Another quarter had vulnerable plaques, which are associated with heart attacks. Participants also had a 71% increased risk for the inflammatory marker interleukin 6, which is associated with plaque and coronary artery disease.

“Data from REPRIEVE connect inflammation and immune activation to coronary artery disease in a large study of people with HIV under good virologic control and with low traditional risk...even in young people with HIV with low traditional [atherosclerotic cardiovascular disease] risk,” Udo Hoffmann, MD, of Massachusetts General Hospital, and colleagues concluded.