

Cheaper Test for Atherosclerosis Works in HIV

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A method for diagnosing clogged arteries in HIV-negative patients works well in HIV-positive patients too, according to the authors of a research letter [published](#) in the July 11 issue of *AIDS*.

Over time, plaque can accumulate inside a person's arteries, making the arteries more rigid, narrow and vulnerable to having the plaque rupture and cause a blood clot in the heart or brain. This process, called atherosclerosis, is of growing concern among people living with HIV as they grow older, thanks to the success of antiretroviral (ARV) therapy.

The most accurate method for diagnosing atherosclerosis involves ultrasonography of the neck, which measures carotid intima-media thickness (IMT). Unfortunately the procedure is expensive and not widely available. A less sophisticated and expensive method most often used to diagnose clogged arteries in the limbs, called the ankle brachial index (ABI), compares blood pressure in the arm with blood pressure in the lower leg. ABI has been found to have similar accuracy as measuring IMT, at least in older, diabetic, HIV-negative adults.

To determine whether ABI is as accurate as IMT in younger HIV-positive patients without diabetes, Félix Gutiérrez, MD, from the Hospital General Universitario de Elche in Alicante, Spain, and his colleagues enrolled 139 HIV-positive patients into a study comparing ABI and IMT. Most of the patients were male and were taking ARV therapy, and the average age was 46.

Gutiérrez's group found that people with an abnormally low ABI, which indicates reduced blood flow through the leg arteries, were very likely to have thickening of the throat artery (a high IMT). Though the authors concede their study did not look at clinical outcomes, such as heart attacks, they conclude that ABI could be an effective and inexpensive screening tool for atherosclerosis in people living with HIV.