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Motivation: For Patients, There's Beauty in the Ugly Truth

Seeing is believing for heart patients. A new study suggests that when patients see a scan showing plaque accumulation in their own arteries, their adherence to a lipid-lowering drug regimen increases significantly.

Researchers studied 505 asymptomatic patients on statin therapy who had their arteries examined by electron beam tomography, which produces a picture of arterial plaque. Each patient looked at the actual scan, which clearly showed the artery-blocking plaque as bright white spots.

The patients were informed of the severity of blockage, and the researchers explained the consequences related to heart disease.

After controlling for age, sex, hypertension, diabetes, tobacco use and family history, the amount of plaque seen on the scan at the outset of the study remained an independent predictor that a patient would stay on a prescribed lipid-lowering medicine.

The more severe the plaque accumulation, the more likely the patients were to stay on their medicine. Among the 25 percent of the participants with the least severe buildup, 53 percent were still on their regimens when researchers followed up an average of three and a half years later. By contrast, among the 25 percent with the most severe accumulation, 92 percent were still taking their drugs.

"I'm not saying that everyone should get this test," said Dr. Matthew Budoff, the lead author on the study and an associate professor of medicine at the University of California, Los Angeles. "But I think this is a very useful tool for patients who

are prone to stop taking their medicine."

"For certain patients, the test will definitely increase adherence, and those patients should get it," Dr. Budoff said.

The findings appeared last month in the journal *Atherosclerosis*.