

New heart villain seen

By Steve Sternberg, USA TODAY

Two leading research groups independently reported today that lowering blood levels of a protein that promotes artery inflammation is just as important as reducing bad cholesterol for preventing heart attacks and strokes.

Their conclusions reflect a major shift away from the notion that bad cholesterol, or LDL, is the primary villain in heart disease. Levels of C-reactive protein (CRP) also must be reduced to halt the disease's progression, researchers said.

In that simple assertion lies the seed of a major debate among heart specialists. Revised just last year, current treatment guidelines reflect what studies then showed: the importance of lowering LDL to below 70 milligrams per deciliter of blood in high-risk patients.

But most doctors don't track CRP as they do cholesterol or prescribe drugs to reduce it, such as Lipitor and other potent statins. If doctors are to provide quality care, the researchers said, that will have to change. The inexpensive CRP test (\$10 to \$15) is widely available and can be done as part of other blood tests. "If we think only about cholesterol, we now have hard evidence that we're not doing the best we can for our patients," said the lead author of one of the papers, Paul Ridker of Brigham and Women's Hospital in Boston.

Steven Nissen of the Cleveland Clinic, and lead author of the second study, agrees: "Our studies suggest that the higher your level of CRP, the more your coronary artery disease progresses."

But Scott Grundy of the University of Texas Southwestern Medical Center in Dallas, and author of the current guidelines, challenged the findings. "I agree lowering LDL only reduces heart attack risk by one-third. You've got two-thirds of the risk remaining. CRP is responsible for some of that risk, but there are other factors involved, too."

Still, Nissen predicted that the study will generate interest in other drugs that reduce CRP, including the experimental anti-smoking, anti-obesity drug rimonabant and some diabetes drugs.

Ridker's team analyzed the cases of 3,745 patients in a comparison of cholesterol-lowering drugs Lipitor and Pravachol. Ridker said the drug used is not as important as reducing LDL to below 70 for high-risk patients, and reducing CRP to below 2 milligrams per liter of blood. Even when you hit the LDL target, you reduce the risk of recurrent heart attacks or of dying from a heart attack or stroke another 50% by lowering the CRP to 2.

In a study of the same drugs sponsored by Lipitor maker Pfizer, Nissen's team examined arteries to see what role inflammation plays in the progression of coronary artery disease.

People with better-than-average reductions of LDL and CRP cut the progression rate to zero.

Both studies appear in today's *New England Journal of Medicine*.