New Treatment Targets Found in ACS Patients

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STOCKHOLM — Patients with acute coronary syndrome who are treated with a high-dose statin and other standard medications still have a high, 13% rate of cardiac events during follow-up, which suggests a need for more interventions to further lower event rates.

"Patients are not fully protected by a statin, aspirin, clopidogrel, an angiotensin-converting enzyme inhibitor, and a β-blocker. They need other treatments, too," Kausik K. Ray, M.D., said at the annual congress of the European Society of Cardiology.

In his analysis of more than 2,000 patients who received 80 mg of atorvastatin (Lipitor) daily in a recent major trial, Dr. Ray suggested more diligent control of diabetes, raising the serum levels of HDL cholesterol, and anti-inflammatory treatment might lower event rates even more.

The data came from the intensive-treatment arm of the Pravastatin or Atorvastatin Evaluation and Infection Therapy–Thrombolysis in Myocardial Infarction 22 (PROVE IT–TIMI 22) trial (N. Engl. J. Med 2004;350:1495-504).

That study randomized more than 4,000 patients with acute coronary syndrome to treatment with either an intensive (80 mg atorvastatin daily) or moderate (40 mg pravastatin daily) lipid-lowering regimen. The results showed that patients whose LDL cholesterol levels dropped below 70 mg/dL had better outcomes during 2 years of follow-up, compared with patients who had higher levels of LDL cholesterol.

The new analysis focused entirely on the patients who received 80 mg atorvastatin daily. During the first 4 months of treatment, 124 patients in this group died or had a myocardial infarction or unstable angina; the remaining 1,939 patients had no events. Beyond the first 4 months, another 140 patients had events and 1,777 were event free.

A multivariate analysis showed that the serum level of HDL cholesterol at baseline was a significant predictor of early events. For every 1 mg/dL rise in the HDL cholesterol level, the risk of an event during the first 4 months fell by 3%, said Dr. Ray, a cardiologist at Brigham and Women's Hospital in Boston. Other significant determinants of early risk were age and smoking.

A second analysis showed that the 4-month serum levels of hemoglobin (Hb) A_{1c} and C-reactive protein (CRP) were significant predictors of late events. For every 1% rise in the level of HbA_{1c}, the risk of a late event rose by 28%. For every one-log rise in the serum level of CRP, the risk rate rose by 25%, he said. Other determinants of late risk were age, gender, and the serum level of LDL cholesterol at 4 months.

HDL cholesterol is another potential target for immediate intervention, Dr. Ray told this newspaper ■

Trial Compares ACS Therapies

The early, invasive treatment of acute coronary syndromes that is recommended by the American College of Cardiology, American Heart Association, and European Society of Cardiology was no better than a more conservative approach in a large, randomized clinical trial comparing the two strategies. The trial was undertaken becuase it was unclear if early revascularization lowered mortality in high-risk ACS patients, compared with early, intensive medical therapy followed by revascularization only in selected patients.

In the trial, 604 patients at 42 hospitals in the Netherlands were randomly assigned to undergo early angiography with percutaneous coronary intervention or coronary artery bypass graft surgery when appropriate, and 596 were assigned to medical management and proceeded to revascularization only if medical therapy failed.

Mortality at 1 year was identical in the two groups (2.5%), and freedom from angina was nearly identical. In contrast, the risk of MI was 5% higher in those who had early, invasive treatment, and most of the MIs were procedure related, reported Robbert J. de Winter, M.D., Ph.D., of the Academisch Medisch Centrum, Amsterdam, and his associates (N. Engl. J. Med. 2005;353:1095-104).

—Mary Ann Moon

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