# CLINICAL CAPSULES

## Long-Term Clopidogrel Is Cost Effective

The long-term use of the platelet inhibitor clopidogrel in patients with acute coronary syndromes is cost effective as well as clinically effective, reported William S. Weintraub, M.D., of Emory University, Atlanta, and his associates.

The short-term safety, efficacy, and cost-effectiveness of the drug were confirmed in the CURE study (Clopidogrel in Unstable Angina to Prevent Recurrent Events), a multinational, randomized trial involving over 12,000 ACS patients. Dr. Weintraub and his associates examined data from the trial in order to translate the reduction in recurrent cardiac events into estimated gains in life expectancy. They then estimated the cost of treatment per year of life gained (J. Am. Coll. Cardiol. 2005;45:838-45).

In this analysis, only the cost of the drug itself and the direct medical care costs for hospitalization were assessed; the costs of lost productivity, outpatient treatment, rehabilitation, and nursing home care were not considered. The researchers found that the long-term costs of clopidogrel therapy ranged from $4,910 to $6,473 per year of life gained, based on two different models for estimating life-years lost in a variety of gender- and age-specific groups.

## Invasive vs. Medical Treatment for MI

For MI patients, the choice between invasive management and more conservative medical management still depends more on cardiac catheterization rates in their geographic region than on their age, risk profile, or clinical presentation, said Therese A. Stukel, Ph.D., of Dartmouth Medical School, Hanover, N.H., and her associates.

They analyzed data from a national sample of over 158,000 Medicare patients hospitalized with acute MI who resided in 566 discrete geographic regions with distinct levels of cardiac services. The clinical severity of MI was the same across all regions, but treatment varied greatly.

The use of cardiac catheterization ranged from a low of 29% to a high of 93%. "Regions with more cardiac catheterization laboratory capacity had a commensurately more intensive invasive management style," they said (JAMA 2005;293:1329-37).

Across all geographic regions, younger and lower-risk patients were more likely to undergo invasive procedures, even though "evidence suggests that invasive management strategies primarily benefit elderly or high-risk patients and may not be warranted in lower-risk patients," they added.

These findings show that monitoring the use of expensive, invasive cardiac technology and focusing on evidence-based management strategies should remain "a national priority," they said.

## CRP Predicts 30-Day Outcome in MI

The high-sensitivity C-reactive protein (hsCRP) assay predicts the likelihood of major adverse cardiac events in the 30 days after percutaneous coronary intervention (PCI) for acute myocardial infarction, said Hon-Kan Yip, M.D., and associates at Chang Gung Memorial Hospital, Kaohsiung, Taiwan.

They measured CRP in 146 PCI patients, 30 matched patients with angina, and 30 healthy control subjects. Overall, CRP levels were markedly higher in the first group than in the other two. The rate of major adverse cardiac events at 1 month was 23.3% in those with high CRP levels (over 2.37 mg/L) and 4.1% in those with low CRP levels (2.37 mg/L or below), they reported (Chest 2005;127:803-8).

"We encourage the use of this powerful parameter for the risk stratification of patients in the clinical setting of acute MI. Furthermore, patients with an hsCRP level greater than 2.37 mg/L should receive particular attention because they have a 5.7-fold increase in 30-day MACE," they said.

## Assessing Postop Cognitive Decline

Physicians can use the Paced Auditory Serial Addition Test (PASAT) to assess patients' cognitive decline after cardiac surgery, said Yolanda Carrascal, M.D., of the University of Valladolid (Spain) and her associates.

Postoperative cognitive deficits have been reported in up to 80% of such patients, most often after extracorporeal circulation. Typically, cognitive assessment requires a complex battery of tests that can be performed only by experienced psychometricians. What is needed is a brief, simple test that can be administered by personnel not specifically trained in psychometrics, the investigators said (Interact. Cardiovasc. Thorac. Surg. 2005;4:216-21).

The PASAT is a 2-minute test of simple addition that has been used since the 1970s to assess neurologic deterioration after mild traumatic brain injury, and more recently to track cognitive damage secondary to disorders such as multiple sclerosis.

Dr. Carrascal and her associates administered the PASAT to 132 patients before and after cardiac surgery with extracorporeal circulation; 60 (45.5%) had significant cognitive decline after the procedure. Half still had impairment 4 months later.

**—Mary Ann Moon**