CLINICAL CAPSULES

Unrecognized MI Tied to Stroke Risk

Men with unrecognized MI are at significantly increased risk for stroke, a large population-based cohort study has shown.

Of 6,439 participants in the Rotterdam Study who were free of stroke and MI at baseline and who had digital echocardiographic data available, 505 had a stroke during 12 years of follow-up. The stroke patients included 213 men and 292 women.

Unrecognized MI—defined as ECG evidence of MI in a patient who did not report a history of MI—occurred in 159 men and 202 women, and was associated with a 75% increase in stroke risk, compared with participants who did not have evidence of MI; the age- and sex-adjusted hazard ratio was 1.76, Dr. Monique Breteler reported at the 31st International Stroke Conference.

The risk remained significantly elevated after adjusting for cardiovascular risk factors such as smoking, diabetes, hypertension, and total and HDL cholesterol levels (hazard ratio 1.80), said Dr. Breteler of Erasmus University Medical Centre in Rotterdam, the Netherlands. However, stratification by gender showed that the risk was significantly elevated only in men (hazard ratio of 2.53 for men vs. 1.27 for women). As for stroke types, of the 505 that occurred in the patient population, 299 were ischemic, 48 were hemorrhagic, and 158 were of unspecified type. The study data are of particular concern given the finding—also from the Rotterdam study—that 43% of MIs are unrecognized, Dr. Breteler said.

She noted that further study is needed to evaluate possible mechanisms for the relationship between unrecognized MI and stroke. Recognized MI occurred in 442 patients (305 men and 137 women); these patients had a borderline association with increased stroke risk.

Depression Hinders Cardiac Rehab

Both social isolation and depression hampered health behaviors in a study of 492 patients who had acute coronary syndrome events, Dr. Manual Paz-Yepes reported in a poster presented at the annual meeting of the American Psychosomatic Society.

Within 7 days after their ACS event, all patients completed the Beck Depression Inventory and the UCLA loneliness scale, a measure of social isolation; they completed the tests again after 3 months, wrote Dr. Paz-Yepes of Mount Sinai School of Medicine, New York.

The 174 patients without life partners were significantly less likely than the 318 patients with partners to participate in cardiac rehabilitation (35% vs. 64%) or exercise (46% vs. 57%), and were more likely to smoke (15% vs. 8%) 3 months after an acute coronary syndrome (ACS) event.

In regression analysis, depression, but not scores on the UCLA loneliness scale or partner status, was significantly associated with reduced participation in cardiac rehabilitation or exercise, and with reduced medication adherence. Higher loneliness scores were significantly associated with decreased medication adherence, lack of exercise, and greater likelihood of smoking.

Both social isolation and depression should be considered when discussing health behaviors with ACS patients, and different treatment strategies may be needed for depressed patients, compared with isolated patients, the investigators noted.

Doppler Helps Define LV Hypertrophy

Doppler myocardial imaging to assess systolic activation delay can help determine if a patient has hypertrophic cardiomyopathy or merely has the cardiac effects of athletic training, Italian researchers reported.

Dr. Antonello D'Andrea of the Second University of Naples (Italy) and colleagues followed 70 patients with hypertrophic cardiomyopathy (HCM) and 85 age- and sex-matched competitive athletes (40 swimmers and 45 weight lifters) with enlarged left ventricles and interventricular septa thicker than 12 mm. In the total sample, average age was 29, and more than 80% of subjects were men (Br. J. Sports Med. 2006;40:244-50).

During the 4-year follow-up period, the study's primary end point was cardiovascular mortality, defined as death resulting from documented significant arrhythmia, cardiac arrest, heart failure, or MI, with no precipitating factors. Eight HCM patients died during follow-up, whereas none of the athletes had a cardiovascular event.

All participants underwent standard pulsed Doppler echocardiography and pulsed Doppler myocardial imaging (DMI), as well as 24-hour Holter monitoring. HCM patients exhibited a "significant global Doppler interventricular delay," the authors reported. The investigators estimated that a delay cutoff value of more than 45 milliseconds put HCM patients at higher risk of sudden cardiac death.

The researchers concluded that "pulsed DMI may represent an effective noninvasive and easily repeatable technique for assessing the severity of regional delay in activation of LV walls and therefore for the differential diagnosis between patients with either physiological or pathological LV hypertrophy."

—From staff reports