CLINICAL CAPSULES

Occult CAD in Intracranial Ischemia

People who have a transient ischemic attack or nondisabling ischemic stroke but are not thought to have heart disease often harbor occult coronary artery disease, reported Juan F. Arenillas, M.D., and his associates at Vall d'Hebron University Hospital, Barcelona, Spain.

They assessed 65 patients with a recent, nondisabling ischemic stroke and 22 with a recent TIA in what they described as the first study to assess myocardial perfusion in patients with intracranial atherosclerosis. The patients were found to have a total of 175 intracranial stenoses. None of the subjects were thought to have CAD (Stroke 2005;36:1201-6).

Myocardial perfusion single-photo emission CT revealed that 34 patients (52%) had significant myocardial ischemia, including anterior, septal, or apical defects, as well as inferior or lateral perfusion defects. Patients whose stroke or TIA was attributed to middle cerebral artery or vertebrobasilar stenoses and who were found to have asymptomatic internal carotid artery stenoses had a 100% chance of having silent CAD. "We suggest that this pattern of distribution … may serve as an indicator of a generalized atherosclerotic disease," the researchers said. Coronary testing should be considered for these patients because they are at high risk for occult CAD, they said.

Impaired Cognition Predicts CHD, Stroke

Low cognitive function predicts cardiovascular events independent of established cardiovascular risk factors, said Jacob S. Elkins, M.D., of the University of California, San Francisco, and his associates.

The researchers used data on 12,096 middle-aged subjects enrolled in a population-based prospective study to evaluate whether below-normal cognitive function could be an early manifestation of vascular end-organ injury to the brain, and could therefore identify people at risk for impending CV events. During a mean follow-up of 6.4 years, there were 292 incident MIs, 50 deaths from coronary heart disease, and 174 strokes in the study population (Neurol. 2005;64:1750-5).

Subjects in the lowest quartile of cognitive performance for their demographic backgrounds had a 50% higher risk of such events than did those in the highest quartile of cognitive performance, after the data were adjusted for known CV risk factors. The magnitude of this association was comparable to that for other major risk factors such as left ventricular hypertrophy or low HDL cholesterol. This suggests that simple cognitive testing might prove useful for risk stratification, the investigators said.

ICDs Perform Outside Clinical Trials

In routine medical practice with diverse patient populations, implantable cardioverter-defibrillators reduce mortality as much as in clinical trials with highly selected subjects who received optimal care, according to Paul S. Chan, M.D., of the University of Michigan, Ann Arbor, and his associates.

They assessed mortality in 6,996 patients treated at Veterans Administration hospitals who had preexisting ischemic heart disease and clinical heart failure at the onset of ventricular arrhythmia. About 20% of the patients received ICDs; the others were managed medically. Both all-cause and cardiac-specific mortality were significantly lower in the ICD group, with an overall risk reduction of 28% (J. Am. Coll. Cardiol. 2005;45:1474-81).

Only 4.2 patients needed to be treated with an ICD to avert a single cardiovascular death. "Few therapies in all of medicine have shown such striking benefits for overall survival," the researchers noted.

Can Hair Loss Signal CVD?

Sometimes a prosaic symptom such as hair loss provides the clue that is crucial to diagnosis, according to Yvo Smulders, M.D., of VU University Medical Center, Amsterdam, and his associates.

They reported on a 39-year-old man who felt fine but mentioned at a routine physical exam that he had more hair loss than usual during the previous year. The only abnormalities found on the exam were alopecia and hypertension. But testing revealed ECG abnormalities, high cholesterol, elevated serum creatine phosphokinase, and renal insufficiency. Silent ischemic heart disease was suspected.

Clinicians at a cardiology clinic where the patient was referred thought that the combination of hair loss and high creatine phosphokinase indicated hypothyroidism instead. Daily thyroxine therapy led to normalization of the patient's blood pressure, ECG readings, renal function, and serum enzymes—and hair regrowth, the investigators said (Lancet 2005;365:544).

Hypothyroidism often involves hypertension due to increased systemic vascular resistance, high cholesterol due to reduced hepatic clearance of LDL cholesterol, and renal insufficiency, presumably due to a hypodynamic circulation, they said.

—Mary Ann Moon