CLINICAL CAPSULES

Placental Syndromes and CVD Risk

Women who have had placental syndromes are at high risk for premature cardiovascular disease, particularly if the fetus was compromised, Dr. Joel G. Ray of the University of Toronto and his associates said.

The level of cardiovascular risk that was conferred by a placental syndrome—preeclampsia, gestational hypertension, or placental abruption or infarction—was found to be comparable to that of conventional risk factors such as hypertension, obesity, diabetes, and dyslipidemia.

Dr. Ray and his associates assessed cardiovascular outcomes in a population-based study of Ontario residents who gave birth between 1990 and 2004. The mean maternal age at delivery was 28 years; of the 1,026,265 subjects, 75,380 (7%) had a placental syndrome (Lancet 2005;366:1797-803).

After a mean of 8.7 years' follow-up, cardiovascular events had occurred in more than twice as many women with placental syndromes as in women without placental syndromes; irrespective of the presence of potential confounders such as diabetes, 500 events per million person-years occurred among those with the syndromes, compared with 200 events per million person-years in women without. The mean age was 38 years at the time of the first cardiovascular event—coronary, cerebrovascular, or peripheral artery events—or the need for a revascularization procedure.

The risk for cardiovascular events was even higher if the placental syndromes led to fetal growth restriction or intrauterine fetal death. It was higher still in women who had preexisting cardiovascular risk factors when they became pregnant. The findings do not imply that placental disorders cause cardiovascular events to occur in the near future, the investigators cautioned. "Rather, a more plausible explanation relates to a woman's abnormal metabolic milieu that predates her pregnancy and continues after delivery."

ACS Outcomes in High-Risk Patients

High-risk patients with acute coronary syndromes remain likely candidates for further cardiovascular events and death at 1-year follow-up despite aggressive intervention, according to Dr. Kenneth W. Mahaffey and his associates.

The Superior Yield of the New Strategy of Enoxaparin, Revascularization, and Glycoprotein IIb/IIIa Inhibitors (SYNERGY) trial involved more than 10,000 patients with ACS, treated in 12 countries, who were randomly assigned to receive either low-molecular-weight heparin (enoxaparin) or unfractionated heparin, and who were also treated with an early invasive management strategy—over 70% had percutaneous coronary intervention or coronary artery bypass graft surgery. Most patients (92%) also received aspirin, clopidogrel (54%), β-blockers (85%), ACE inhibitors (73%), and/or statins (81%), at the discretion of their clinicians.

"Overall, nearly 18% died or experienced nonfatal MI [at] 6 months of follow-up, and 7% died by 1-year follow-up, despite aggressive coronary revascularization and high use of evidence-based therapies at the time of hospital discharge," reported Dr. Mahaffey of Duke Clinical Research Institute, Durham, N.C., and his associates (JAMA 2005;294:2594-600).

Outcomes were even worse for the highest-risk patients, defined as those who were 60 years or older, had elevated levels of cardiac biomarkers, or had adverse ECG changes. Among such patients, 21% had either died or sustained a nonfatal MI within 6 months of their initial ACS, and 10% had died within 1 year.

The two anticoagulants were found to perform as well over the long term as they had in the short term.

Erectile Dysfunction and CVD

Erectile dysfunction should be considered a red flag that a man is at increased risk for cardiovascular disease, Dr. Ian M. Thompson of the University of Texas, San Antonio, and his associates wrote.

They prospectively assessed a cohort of 9,457 men for both of these diseases over the course of 7 years. The men were the subset of participants in the Prostate Cancer Prevention Trial who were randomized to placebo (JAMA 2005;294:2996-3002).

At baseline, 8,063 (85%) of the 9,457 men had no CVD. Of these men, 3,816 (47%) had erectile dysfunction (ED) at study entry. Among the 4,247 men without ED at study entry, 2,420 (57%) reported incident ED after 5 years. Risk factors for CVD and ED are similar, judging from findings from proportional hazards regression models.

Incident ED signaled an increased risk for subsequent cardiovascular events (hazard ratio of 1.25). For men with either incident or prevalent erectile dysfunction, the risk was greater (hazard ratio 1.45). The association was in the range of risk linked to current smoking or a family history of MI, Dr. Thompson and his colleagues reported.

—From staff reports

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