Fewer, Milder MIs Linked to Dip in Smoking Rates

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BARCELONA — North Americans and Europeans have been presenting with milder acute MIs for the last 2 decades, and a new Swedish study suggests the declining popularity of smoking may be a factor.

The study, which involved 121,032 consecutive admissions for acute MI to Swedish coronary care units in 1996-2004, showed smoking was an independent predictor of presentation with a more extensive ST-elevation MI (STEMI) rather than a non–ST-elevation MI (NSTEMI), Dr. Lena Bjorck reported at the joint congress of the European Society of Cardiology and the World Heart Federation.

Smoking is known to promote coagulation and interfere with thrombolysis. Because thrombosis plays a key role in MI, smoking might be expected to result in increased likelihood of a larger STEMI when MI occurs, said Dr. Bjorck of Sahlgrenska University Hospital, Goteborg, Sweden.

The trend was strongest in patients under age 65. Some 44% of men and 54% of women under 65 who presented with STEMI were current smokers, compared with 34% of men and 37% of women with NSTEMI.

In a multivariate analysis, current smoking was an independent predictor of STEMI in patients with MI. Men younger than 65 years who presented with MI and were current smokers were 40% more likely than nonsmokers to have STEMI; women who were current smokers were 90% more likely. Older men who smoked were 22% more likely than nonsmokers to present with STEMI, and older women who were current smokers were 34% more likely.

Most Heart Recipients Can Carry to Term

BOSTON — Live births occurred in 70% of heart transplant recipients who became pregnant after surgery, according to a review of 36 patients with 60 singleton pregnancies reported to the National Transplantation Pregnancy Registry.

Of 42 live-born children, 16 were healthy and developing well at the time of follow-up. Three children were receiving medical management for congenital heart disease, the same diagnosis for which their mothers received transplants. In the other three, one underwent a hypospadias repair, one was treated for attention-deficit hyperactivity disorder, and one died from a traumatic injury, Lisa A. Coscia said during a poster session at the 2006 World Transplant Congress.

These 42 children were born at a mean gestational age of 37 weeks (5 were premature) and with a mean birth weight of 2.67 kg. A cesarean section was performed in 14 deliveries. Neonatal complications developed in 11 cases. In the 18 unsuccessful pregnancies, 11 fetuses were aborted spontaneously and 5 for therapeutic reasons. One woman had an ectopic pregnancy and another had a stillborn delivery, according to Ms. Coscia, a registered nurse in the department of surgery at Temple University, Philadelphia.

The 36 patients conceived their pregnancies a mean of 5 years after their transplants, although this ranged from as little as 2 months to as much as 15 years. They had an average age of 28 years at conception, ranging from 18 to 39 years. During pregnancy, hypertension was the most common morbidity (43%) in the women, followed by infections (14%), preclampsia (11%), and gestational diabetes (3%). None of the mothers (25%) died after pregnancy, although all of the deaths occurred more than 2 years post partum. These deaths were attributed to cardiac arrest (2), acute rejection (2), and in one patient each, vasculopathy, atherosclerosis, sepsis, lymphoma, and noncompliance. The other 27 mothers (75%) had adequate graft function at follow-up.

The congress was sponsored by the American Society of Transplant Surgeons, the American Society of Transplantation, and the Transplantation Society.

— Jeff Evans