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The Hockey Heart Study

Exercising at extremes of intensity may trigger acute cardiovascular events. Sanita Atwal and colleagues studied cardiac responses in 113 middle-aged men playing recreational hockey. After baseline cardiac risk factors were assessed, the subjects underwent holter electrocardiographic monitoring before, during and after at least one hockey game. For all subjects the maximum heart rate (HR_{max}) exceeded the target exercise heart rate (calculated as



55% to 85% of the age-predicted HR_{max}). The mean period that the heart rate exceeded 85% of the HR_{max} was 30 minutes. In 80 (70.1%) of 114 holter data sets, heart rate recovery was slow. Nonsustained ventricular tachycardia was seen in data from 2 holter monitoring sessions and ST-segment depression in data from 15 sessions. The authors conclude that middle-aged men playing recreational hockey may often be exercising too intensely and can have cardiac responses that might be dangerous to their health. In a related commentary Murray Mittleman emphasizes the benefit of regular exercise, even if there are transient increases in cardiac risk associated with intense activity.

See pages 303 and 331

Home births

Since 1998 midwives have been licensed to attend home births in British Columbia. Patricia Janssen and colleagues compared perinatal outcomes for planned home births attended by midwives (862 births) and for planned hospital births attended by either physicians (743) or midwives (571). The authors found that more women in the home birth group than in the midwife-attended hospital group had intact perineums (55.0% v. 44.1%). As well, the incidence of maternal infection was lower in the home birth group than in either the physician-attended or midwife-attended hospital groups (0.7% v. 3.0% and 3.5% respectively). Women in the home birth group were also less likely than those in the physician-attended hospital group to have epidural anesthesia, an induction or an episiotomy. Neonatal outcomes included similar rates of meconium aspiration in all groups and 3 perinatal deaths (0.3%) in the home birth group, 1 (0.1%) in the physicianattended group and none in the midwife-attended hospital group. Five babies (0.6%) in the home birth group required ventilatory assistance for at least 24 hours, as compared with none in either comparison group. The data suggest that there is no increased risk associated with planned midwifeattended home births, but the authors acknowledge the need for ongoing evaluation of rare, but serious, adverse outcomes, including hemorrhage, death and the need for ventilatory support. In a related commentary, Régis Blais describes the experience with midwife-attended births in Quebec.

See pages 315 and 335

Incontinence after childbirth

Incontinence of stool and flatus is relatively common after childbirth. To identify risk factors Erica Eason and colleagues examined characteristics and delivery details of 949 women who gave birth vaginally or by cesarean section in 1995/96; 3 months post partum the women completed a questionnaire on the frequency of anal incontinence. In total, 3.1% (29) of the women had fecal incontinence and 25.5% (242) had involuntary loss of flatus. Among the women who delivered vaginally, those with third- or fourth-degree perineal tears were almost 3 times more likely than those without anal sphincter damage to have incontinence of stool. Forceps delivery and anal sphincter tears were independent risk factors for anal incontinence. Anal sphincter injury was independently associated with first vaginal birth, median episiotomy, forceps delivery and vacuum-assisted delivery but not with birth weight of 4000 g or more. In a related commentary Scott Farrell discusses pelvic injury associated with vaginal birth and cesarean section and suggests that all the benefits and risks associated with both modes of delivery be considered by women and their obstetricians.

See pages 326 and 337

Asymptomatic kidney disease

It is not uncommon for otherwise well individuals to have blood or protein detected on urine screens. In the second ar-

ticle of our nephrology series, Andrew House and Daniel Cattran discuss practical approaches to the diagnosis, management and referral of patients with asymptomatic hematuria and proteinuria.

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