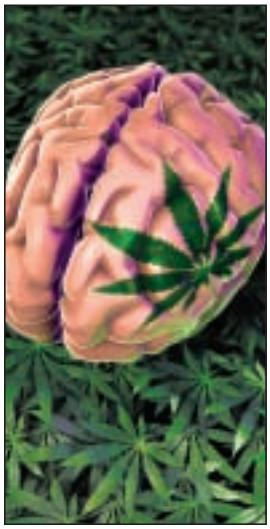


Lianne Friesen/Nicholas Woolridge

Marijuana use and IQ

Marijuana produces acute cognitive changes, but does it have a long-term effect on the user's intelligence? In a prospective study examining changes in intelligence over time among marijuana users, Peter Fried and colleagues compared the intelligence quotient (IQ) scores of subjects at 9–12 years of age (before initiation of marijuana use) with their scores at 17–20 years. The 70 subjects were grouped according to whether they were non-users (n = 37), light users (< 5 joints per week, n = 9), heavy users (≥ 5 joints per week, n = 15) or former users (no marijuana in at least 3 months, n = 9). Current marijuana use was associated in a dose-related fashion with a decline in IQ over the ages studied ($p < 0.05$). Heavy users had a decrease in IQ scores of 4.1 points on average ($p < 0.05$), as compared with gains in IQ scores among light users (mean 5.8 points), former users (mean 3.5) and non-users (mean 2.6). The authors conclude that light and former marijuana use does not appear to have a long-term effect on global intelligence, whereas heavy use appears to be detrimental.

See page 887

Low-molecular-weight heparins

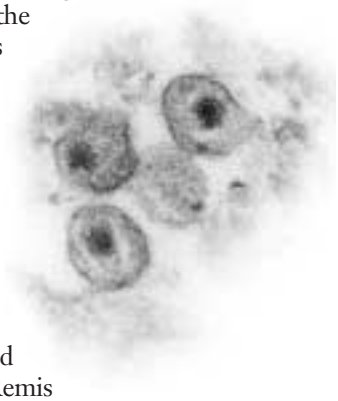
The use of unfractionated heparins in the treatment of acute coronary syndromes is well established, but the use of low-molecular-weight (LMW) heparins in this setting is becoming more common. Walter Ageno and Alexander Turpie review studies demonstrating the safety and efficacy of 3 LMW heparins — dalteparin, enoxaparin and nadroparin — in reducing the risk of acute cardiac ischemia.

Christine Kenney

See page 919

HIV infection in women

As the proportion of women who are HIV positive grows, differences in risk factors for HIV seroconversion between men and women need to be identified. As part of a study involving injection drug users (IDUs) in Vancouver that began in 1996, Patricia Spittal and colleagues identified 939 participants (624 men and 315 women) who were HIV negative at enrolment and who completed follow-up study visits and serology tests up to March 2001. At each visit blood samples were drawn and information was collected on patterns of drug use and high-risk behaviours. Over the period studied, seroconversion occurred in 64 men and 46 women. Among the female participants, independent predictors of seroconversion were injecting cocaine at least once a day (adjusted relative risk [RR] 2.6, 95% confidence interval [CI] 1.4–4.8), requiring help to inject (adjusted RR 2.1, 95% CI 1.1–3.8), having unsafe sex (adjusted RR 2.9, 95% CI 0.9–9.5) and having an HIV-positive partner (adjusted RR 2.7, 95% CI 1.0–7.7). Among the male participants, the independent predictors were injecting cocaine more than once a day (adjusted RR 3.3, 95% CI 1.9–5.6), being Aboriginal (adjusted RR 2.5, 95% CI 1.4–4.2) and borrowing needles (adjusted RR 2.0, 95% CI 1.1–3.4). In a related commentary, Robert Remis briefly discusses the public health and social policy implications of different sex and racial predictors of HIV seroconversion among IDUs.



CDC

See pages 894 and 908

HIV infection in newborns

In Canada, all pregnant women are supposed to be offered voluntary HIV testing to allow treatment and possible prevention of viral transmission to the baby. Ari Bitnun and colleagues reviewed the charts of all newborns found to be HIV positive at Toronto's Hospital for Sick Children from August 1999 to July 2001. They identified 6 cases of HIV-positive infants whose mothers did not know their own HIV status before or during their pregnancy. None of the mothers had known risk factors for HIV infection, and none had undergone HIV testing during their pregnancy. The authors suggest that the incomplete application of guidelines for universal HIV prenatal counselling and voluntary testing are responsible for continued perinatal HIV transmission. In a related commentary, Kathleen Steel O'Connor and Susan MacDonald discuss 5 critical steps that are needed in the current system to prevent perinatal HIV transmission.

See pages 904 and 909