

Clinical shorts

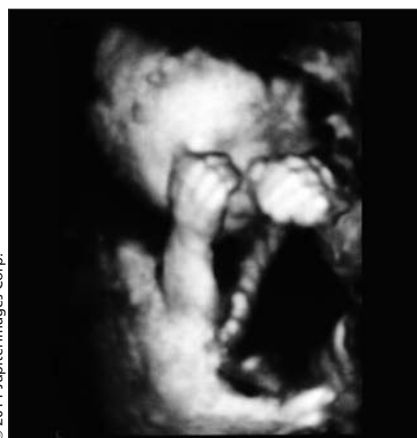
Does pre-exposure chemoprophylaxis prevent HIV? Yes, but only if one takes the treatment.

A large international study looked at whether pre-exposure chemoprophylaxis prevents HIV infection in those at high risk of contact with HIV-infected fluids. Almost 2500 men or transgender women who have sex with men were chosen at random to receive either two antiretroviral drugs or placebo once daily. All the participants were HIV-seronegative at the time of enrolment and received risk-reduction counselling and condoms. After a median follow-up of just over a year, 100 became infected — 36 in the treatment group and 64 in the placebo group — a 44% reduction (95% confidence interval [CI] 15–63) in the incidence of HIV. Serious adverse events were similar between the two groups, although participants in the treatment group were more likely to report nausea in the first month. Detectable blood levels of the study drugs strongly correlated with the prophylactic effect. *N Engl J Med* 2010;363:2587-99.

Induction versus expectant monitoring for intrauterine growth restriction:

Intrauterine growth restriction close to term is associated with increased perinatal morbidity and mortality. Many physicians recommend induction in this situation, but is this precautionary step necessary? A recent randomized trial involving 650 women in Holland showed that there is not much to choose between the two options, but patient preference and availability of close monitoring should be considered. The women in the study had singleton pregnancies with suspected intrauterine growth restriction after 36 weeks' gestation and were chosen at random for either induction or expectant monitoring. There were no important differences in adverse outcomes for mothers and babies between the two groups, although the babies in the induction group were delivered 10 days earlier than those in the monitored group. The rates of cesarean section

were similar in the two groups. The authors caution, however, that the study was not powerful enough to detect small differences in the rates of stillbirth. *BMJ* 2010;341:c7087 doi:10.1136/bmj.c7087.



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Preoperative bowel preparation for elective colorectal surgery:

Traditionally, patients undergoing elective colorectal surgery endure mechanical bowel preparation that may include oral laxatives, restricted diets and enemas. The purpose is to reduce the rate of postoperative infectious complications by decreasing fecal load and bacterial contents of the bowel. A recent guideline endorsed by the Canadian Society of Colon and Rectal Surgeons calls this practice into question. The authors, the Best Practice in General Surgery Committee, found that there is good evidence in the literature from randomized controlled trials and meta-analyses that preoperative bowel preparation does not reduce the rate of postoperative complications. Patients will be relieved to know that the guideline recommends that this routine practice be discontinued. *Can J Surg* 2010;53:385-95.

Upper body exercise and lymphedema:

Women who have had surgery for breast cancer are at increased risk of lymphedema and are often told to avoid lifting heavy objects with the at-risk arm. Unfortunately, this advice can

slow recovery and affect day-to-day activities, such as work, child care, sports and shopping. A recent US study assessed whether slowly progressive weightlifting would increase the rate of onset of lymphedema in women without lymphedema one to five years after unilateral breast surgery that included lymph node dissection. Over 150 women were randomly selected for two groups: the treatment group received a one-year gym membership with three months of supervised weightlifting instruction, and the women in the control group were asked not to change their baseline level of exercise. The researchers found that both groups had an equivalent risk of onset of lymphedema one year later. The participants in the gym program were stronger and had lower body fat than those in the control group. *JAMA* 2010;34:2699-705.

Another reason to nag your teenager:

Although many parents complain that their teenagers are selectively deaf, there is serious concern that increased use of earbuds and other headphones may result in noise-induced hearing loss. As part of the US National Health and Nutrition Examination surveys, over 4300 adolescents completed audiometric testing in 1988–94 and 2005–06. Teenagers were listening to music through headphones or were exposed to loud noise in 2005–06 more than they had been a decade or so earlier (35% in the previous 24 hours versus 20% in 1988–94), but there was no substantial increase in hearing loss. Researchers found, however, that girls in 2005–06 had more noise-induced hearing threshold shifts (a temporary hearing loss that occurs after exposure to loud noise and gradually resolves) than the earlier cohort, which may translate into higher rates of hearing loss in the future. *Pediatrics* 2011;e39-346.

Diane Kelsall MD MEd
Deputy Editor, Clinical Practice
CMAJ

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