

ABOUT OBESITY THERAPY

Anti-obesity drugs, in general, lead to only a modest weight loss of about 5 kg or less at 1 year, according to a meta-analysis of data from more than 75 clinical trials. The US researchers who reported the meta-analysis results examined not only agents specifically approved for use in obesity, such as orlistat and sibutramine, but also other medications being used for weight loss, including sertraline, fluoxetine and bupropion. Despite the somewhat disappointing overall finding, the researchers said this modest amount of weight loss may still be clinically significant. They said the choice of medication for weight loss probably depended on the patient's tolerance to the side effect profile of each agent.

Ann Intern Med 2005; 142: 532-546

BIOMARKER ON THE HORIZON

A protein found in urine and serum holds promise as an early, highly predictive biomarker for acute renal injury.¹ US researchers assayed levels of neutrophil gelatinase-associated lipocalin (NGAL) at baseline and at 2-hourly intervals in 71 children undergoing cardiopulmonary bypass for surgical correction of congenital heart disease. In the 20 children who developed acute renal injury, urine and serum NGAL levels peaked at 2 hours after the bypass followed by a lesser but sustained increase over the 5 days of the study. By comparison, diagnosis of acute renal injury with serum creatinine was only possible 1–3 days after bypass. Earlier detection of acute renal failure would allow for the timely institution of potentially effective treatments and, in an interesting twist, NGAL may also be a mediator of repair mechanisms.²

1. *Lancet 2005; 365: 1231-1238*

2. *Lancet 2005; 365: 1205-1206*

BALANCED TEENAGERS

Balance training with a wobble board can reduce sport-related injuries in healthy adolescents, say Canadian researchers. In a cluster randomised controlled trial, they found that high school students assigned to a daily 6-week, followed by a weekly 6-month, home-based balance-training program using a wobbleboard improved their balance on testing. These students were also less likely to report a sporting injury over the 6-month follow-up period than students who were also tested but not trained. Most of the injuries reported in the study were to the lower extremity and occurred while playing sports that involve a high degree of pivoting or change of direction as well as rapid acceleration and deceleration, such as soccer, basketball, volleyball and hockey.

CMAJ 2005; 172: 749-754

**ASPIRIN AND THE GENTLER SEX**

Low-dose aspirin for primary prevention of cardiovascular disease appears to have different effects in women compared with men. Whereas in men, low-dose aspirin prevents myocardial infarction but not stroke, evidence from the US Women's Health Study suggests the converse for women. The study randomly assigned nearly 40000 healthy women, aged 45 years or older, to receive either 100 mg of aspirin or placebo on alternate days. After 10 years of follow-up, there was a reduced risk of stroke but not myocardial infarction in the aspirin group.

N Engl J Med 2005; 352: 1293-1304

WHERE'S THE LUNG CANCER?

The shift to lower-tar cigarette smoking may have led to a shift in the location of smoking-related cancer, say US researchers. They reviewed the chest x-rays and CT scans of 330 smokers diagnosed with lung cancer between 1993 and 1999 at either of two urban academic medical centres in New York. Compared with smokers of higher-tar cigarettes (≥ 21 mg), smokers of lower-tar cigarettes (< 21 mg) were more likely to have peripheral rather than central lung tumours. This finding supported the hypothesis that lower-tar cigarette smokers compensate for the lower yield of nicotine with deeper inhalation, enhancing the delivery of carcinogenic compounds to peripheral lung regions.

Cancer Epidemiol Biomarkers Prev 2005; 14: 576-581

AVOID COMPOUND TRAGEDY

Bioethics commentators have missed an important moral question posed by the case of Terri Schiavo, according to a Canadian expert. The case involved a patient in a long-term persistent vegetative state, familial disagreement about her likely prognosis and consequently disagreement about appropriate care, resulting in much prolonged legal action. Professor Charles Weijer says that the overwhelming message from most bioethicists — that the widespread use of living wills would prevent future Schiavo-like situations from happening — did not address the question of how we should deal with disagreement among family members when a patient is incapable of directing his or her own care. Weijer suggested that health care teams allow all family members to participate in the decision-making process, affirming the legitimate role of all relatives in seeking what is best for their loved one and, among other things, allow them the time to seek and reach consensus.

CMAJ 2005; 172(8): Online

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