

# In brief



Reuters/Mike Blake

*With a stoicism that would put most human patients to shame, Emma the Labrador demonstrates how to use a pet oxygen mask. The San Diego Fire-Rescue Department accepted a donation of 60 pet oxygen mask kits from Debra Jo Chiapuzio of the Emma Zen Foundation. The non-profit foundation focuses on pet safety and raises funds for pet oxygen masks, which are then donated to fire departments. The masks are specially designed to fit muzzles and snouts of a wide range of household pets, including dogs, cats, ferrets, birds and pigs.*

## From The Cochrane Library

### Making waves in the swimming pool and beyond

Dawn Fraser took up swimming to help with her asthma, so it must be good, right? Well, yes. A new review of swimming training for children and adolescents with stable asthma included eight studies and found that swimming training improved lung function and cardiopulmonary fitness without adverse effects on asthma control (doi: 10.1002/14651858.CD009607.pub2). Also, the Australian swim team could really do with another Dawn.

Two reviews this month look at performance and drugs — not in the context of Australian sports, but how to improve the use of medicines by consumers and doctors. A review of 24 studies involving over 8000 consumers found that multimedia education about medications (primarily through videos) was more effective than no education and at least equivalent to usual forms of education in improving knowledge and acquiring skills (doi: 10.1002/14651858.CD008416.pub2).

An updated review of interventions to improve antibiotic prescribing practices for hospital inpatients now includes 89 studies. The results show that antimicrobial resistance and hospital-acquired infections can be reduced. Restrictive interventions (eg, approval required from an infection specialist) are effective for addressing an urgent need. After 6 months, persuasive interventions (eg, advice and feedback) are just as effective as restrictive ones (doi: 10.1002/14651858.CD003543.pub3).

In contrast, oral borage oil and evening primrose oil are not effective treatments for eczema. That's the unavoidable conclusion of a review of 27 studies involving nearly 1600 participants that found no benefit of either treatment. To drive home the point, the authors note that further research would be hard to justify (doi: 10.1002/14651858.CD004416.pub2).

Another review making waves assesses the effect of longer-term



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modest salt intake reduction (from 9–12 g/day to 5–6 g/day) on blood pressure (BP). The results from 34 studies (3200 participants) show that modest reductions for 4 or more weeks resulted in “important” falls in BP in both hypertensive and normotensive people. According to the reviewers, this provides “strong support” for a reduction in population salt intake, which “will likely lower population BP and, thereby, likely reduce strokes, heart attacks and heart failure”. It's this last phrase that's causing a few ripples. Read the review and see if you agree (doi 10.1002/14651858.CD004937.pub2).

Other new and updated reviews in *The Cochrane Library* ([www.thecochranelibrary.com](http://www.thecochranelibrary.com)) this month include workplace pedometers for increasing physical activity, and parent-mediated early intervention for young children with autism spectrum disorders.

## News

## Early evidence for two-dose HPV schedule

Preliminary evidence from Canada suggests a two-dose quadrivalent human papillomavirus (HPV) vaccine series in girls may be as immunogenic as a three-dose series in women, “although the duration of protection may be less”. In the Phase 3, multicentre study, 830 young women were followed from August 2007 through February 2011. Girls (9–13 years of age) were randomly allocated 1:1 to receive three doses of quadrivalent HPV at 0, 2 and 6 months, or two doses at 0 and 6 months. Young women (16–26 years of age) received three doses at 0, 2 and 6 months. Antibody levels were measured at 0, 7, 18, 24 and 36 months. “Among girls who received 2 doses ... responses to HPV-16 and HPV-18 one month after the last dose were noninferior to those among young women who received 3 doses”, the authors wrote. However, “antibody responses in girls were noninferior after 2 doses vs 3 doses for all 4 vaccine genotypes at month 7, but not for HPV-18 by month 24 or HPV-6 by month 36”. The authors concluded that “more data on the duration of protection are needed before reduced-dose schedules can be recommended”.

*JAMA* 2013; 309: 1793-1802. doi: 10.1001/jama.2013.1625

*JAMA* 2013; 309: 1832-1834. doi: 10.1001/jama.2013.4147

## Growing dilemmas of dabigatran

Two recent publications have highlighted dilemmas facing neurosurgeons with patients taking new anticoagulant dabigatran who sustain a closed head injury (CHI) or an intracranial haemorrhage (IH). The lack of an established specific reversal antidote for dabigatran complicates the treatment of CHIs and may increase mortality rates, the authors of one research article wrote. They reviewed all cases of adults presenting to Delray Medical Center in Florida in the US between February 2011 and May 2011 with a CHI following a fall at ground level. Two of five patients taking dabigatran died, while there were no deaths among the 15 patients taking warfarin and the 25 who were using no anticoagulant. The authors noted “great diversity” in the management of patients taking dabigatran. Another article discussed published reports and research of IH in the context of dabigatran therapy. “When hemorrhage occurs, physicians cannot reliably measure the level of anticoagulation”, the authors wrote. “The development of reversal agents is urgently needed.”

*J Neurosurg* 2013; 1 May (online). doi: 10.3171/2013.3.JNS12503

*Neurosurg Focus* 2013; 34: E7. doi: 10.3171/2013.2.FOCUS1323

## From the MJA archives

### MJA 1965: 16 October (edited extract)

#### The clinical features and diagnosis of the common breast tumours

The most important decision in each case is the decision to operate; hence it may with some truth be argued that differential diagnosis is purely an academic matter. However, careful consideration of the clinical findings can, if the tumour is benign, save the patient needless preoperative worry. It must not be forgotten that a woman will part surgically with

almost anything rather than a breast ... A firm or hard, fixed, non-tender lump just lateral to the sternum, despite its apparent attachment to a costal cartilage, and despite the charm of more fascinating diagnoses, is a cancer of the breast until it is proved otherwise ... The more we see of breast disease, the more we believe that every solitary breast lump should be operated upon. Further, where the suspicion of experience falls, there the knife must follow.

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## Poor educational outcomes after mild iodine deficiency

An Australian study has found a link between suboptimal iodine levels during pregnancy and poorer educational outcomes for offspring. Children whose mothers attended the Royal Hobart Hospital antenatal clinics between 1999 and 2001 — a period of known mild iodine deficiency in the population — were followed up at age 9 years using Australian national curriculum and Tasmanian state curriculum educational assessment data for children in Year 3. Children whose mothers had urinary iodine concentrations (UIC) of <150 µg/L had reductions of 10.0% in their spelling score, 7.6% in grammar and 5.7% in English literacy score compared with children whose mothers' UIC was 150 µg/L or more. The authors concluded that “even mild iodine deficiency during pregnancy can have long term adverse impacts on fetal neurocognition that are not ameliorated by iodine sufficiency during childhood”.

*J Clin Endocrinol Metab* 2013; 30 April (online)

doi: 10.1210/jc.2012-4249

## “Ambiguous” results for naturopathic care

A study published in *CMAJ* supports the hypothesis that addition of naturopathic care to usual care may reduce the risk of cardiovascular disease (CVD) among those at high risk. An accompanying editorial has criticised the study, however, noting that the pragmatic study design involving multiple components introduced some “ambiguity”. The study randomly assigned 246 Canadian postal workers with an increased risk of CVD to either usual care from their general practitioner enhanced by biometric measurements and biochemical assessments three times over a 1-year period, or enhanced usual care plus seven sessions of naturopathic care. A year later, those in the naturopathic group had a reduced adjusted 10-year cardiovascular risk (7.74% v 10.81%) and a lower adjusted frequency of metabolic syndrome (31.58% v 48.48%). The editorial said that, while the

naturopathic care provided was to some extent nonspecific in terms of its content and delivery, “The results [do] provide proof of principle that some aspects of cardiovascular prevention could feasibly and effectively be delegated to naturopaths”.

*CMAJ* 2013; 29 April (online).

doi: 10.1503/cmaj.120567

doi: 10.1503/cmaj.130614



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