Clinical shorts

Soy isoflavones in menopause: Daily administration of soy isoflavone tablets does not prevent bone loss or menopausal symptoms. This is the conclusion of a randomized controlled trial involving 248 women who were in the first few years of menopause and had normal bone density. Participants were randomly assigned to receive 200 mg soy isoflavone tablets or placebo, as well as calcium supplementation if needed to ensure sufficient calcium intake. After two years, there were no significant differences in bone mineral densities of the spine, total hip and femoral neck between those receiving soy tablets or placebo. At baseline, 176 participants reported one or more menopausal symptoms, such as hot flashes (50.0%), night sweats (37.9%), loss of libido (37.1%) and vaginal dryness (31.0%). At the end of the study, the number of menopausal symptoms, except for hot flashes, was similar between the treatment and placebo groups. Around 48% of women in the soy isoflavone group reported having hot flashes, compared with 31.7% in the placebo group ($p = 0.02$). Adverse events were similar between the two groups. Because of a small amount of bone loss in the control group, the study may have been underpowered to detect a treatment effect. See *Arch Intern Med* 2011;171:1363-9.

Do headache patterns change over time? Although a 30-year prospective cohort study found that 69% of participants with migraine and 58% of those with tension-type headache had the same subtype of headache over time, the authors noted that most people in the study tended to have multiple headache subtypes across the lifespan, with no pattern of temporal order of progression. In this Swiss study, 591 participants aged 19 to 20 years were interviewed over a follow-up period of 30 years. Cumulative 30-year prevalences of headache subtypes were 3.0% for migraine with aura, 36.0% for migraine without aura and 29.3% for tension-type headache. Migraine headache was more common in women, whereas men were more likely to experience tension-type headache. The prevalence of migraine without aura tended to decrease over time, with only about one in five participants continuing to have migraine for more than half of the follow-up period. In contrast, the prevalence of tension-type headache tended to increase while participants were in their 20s and 30s, peaking at age 40. Those with migraine headache with aura had the most distress, impairment and duration, as well as increased use of the health care system. Given the heterogeneity of headache syndromes over time, the authors caution that the distinction between discrete headache subtypes may not provide an accurate representation of the manifestations of headache in the general population. See *BMJ* 2011;343:d5076 doi: 0.1136/bmj.d5076.

Persistent isolated microscopic hematuria in teens and young adults: Persistent asymptomatic isolated microscopic hematuria in those aged 16 to 25 years of age is associated with an increased risk of end-stage renal disease requiring treatment within several decades — and may be an early marker of primary glomerular injury. However, the authors of this cohort study tempered these conclusions by stating that the incidence and risk of renal disease developing in this group is quite low. A nationwide, population-based retrospective cohort study was conducted in Israel using medical data from over 1.2 million people examined between 1975 and 1997 for fitness for military service. This information was linked to the Israeli registry of patients requiring treatment for end-stage renal disease. Persistent asymptomatic isolated microscopic hematuria was diagnosed in 3690 (0.3%) people in the study. After almost 22 years of follow-up, end-stage renal disease requiring treatment developed in 26 people (0.70%) with hematuria and in 539 (0.045%) without hematuria, yielding a crude hazard ratio of 19.5 (95% confidence interval 13.1–28.9), with similar findings after adjustment for potential confounders. The results also suggest that glomerular disease was the primary cause of end-stage renal disease in this group. See *JAMA* 2011; 306:729-36.

Does continuous azithromycin reduce exacerbations of COPD? Azithromycin reduced acute exacerbations of chronic obstructive pulmonary disease (COPD) in people with moderate to very severe disease, but its use was associated with hearing loss in this multicentre randomized controlled trial. Over 1100 people with a history of at least one exacerbation of COPD that required a stay in hospital or assessment in an emergency department and who were taking either continuous supplemental oxygen or systemic glucocorticoids in the previous year were randomly assigned to receive azithromycin (250 mg/d) or placebo for one year, in addition to usual care. Those who received azithromycin had a longer median time to first exacerbation than the placebo group (266 v. 174 days, $p < 0.001$). The frequency of exacerbations was also lower in the treatment group, with a hazard ratio for having an acute exacerbation per patient-year of 0.73 (95% confidence interval 0.63–0.84, $p < 0.001$) in those treated with azithromycin. The number needed to treat to prevent one exacerbation was 2.86. Adverse events were similar between the two groups, except that hearing decrements, confirmed by audiogram, were more common in the treatment group (25% v. 20%, $p = 0.04$). There was also an increase in the incidence of colonization by macrolide-resistant organisms in those treated with azithromycin (81% v. 41%, $p < 0.001$). See *N Engl J Med* 2011;365:689-98.

Diane Kelsall MD MEd
Deputy Editor, Clinical Practice
CMAJ

***CMAJ* 2011. DOI:10.1503/cmaj.111422**