Editor’s view

Calcium and vitamin D supplementation

There is increasing debate about the role of calcium and vitamin D supplementation in the prevention of falls and fractures, with studies raising uncertainty about efficacy and concern about the potential risk of cardiovascular disease. An editorial on the appropriate use of calcium and vitamin D supplementation is therefore timely (pp. 576–580). The authors highlight that although studies of the anti-fracture efficacy of supplementation have yielded inconsistent results, calcium and vitamin D supplementation decreases the risk of non-vertebral fractures in older people above the age of 75 years and those living in institutions, where low calcium intake and vitamin D deficiency are common. Although meta-analyses have suggested an increase in cardiovascular risk with calcium supplementation, the authors point out that this association is unproven. Nevertheless, they advocate that poor calcium intake should be addressed by enhancing dietary intake where possible and that supplementation should be targeted on individuals at high risk of fracture and those in whom calcium and vitamin D deficiency is common. As studies have shown an increased risk of falls and fractures with an annual oral administration of high dose vitamin D, they recommend supplementation with more frequent, lower doses of calcium and vitamin D, providing 1,000–1,200 mg calcium and 800 IU vitamin D daily.

Frailty and mortality

Frailty is associated with poor outcome and increased mortality in older people, but is more closely related to the individual’s biological rather than chronological age. Although there are different approaches to the assessment of frailty, the frailty index (FI) is gaining popularity. It provides a measure of the proportion of potential deficits accumulated in the individual. Most studies of FI have been performed in North America, so a research paper investigating the relationship between FI and mortality in a large number of European men and women is welcome (pp. 684–689). The authors calculated the FI in 16,217 women and 13,688 men aged 50 years above, who took part in the Survey of Health, Ageing and Retirement in Europe between 2004 and 2005. Mortality data were then collected between 2005 and 2006, over a mean period of follow-up of 2.4 years. There was a significant association between age and the FI in men and women, but the FI was a better predictor of mortality than age. Although men had lower FI values than women, they had higher mortality rates. The FI has yet to be widely used in clinical practice, but the authors suggest that their data may be useful to European clinicians for the identification of frail older people in whom to target resources. An accompanying editorial (pp. 574–575) explores the possible reasons for the gender differences in FI and mortality, which have been reported in other studies. The authors speculate that the apparent paradox of the higher mortality in men despite lower FI values might reflect a male ‘fitness–frailty pleiotropy’, where the result of optimal physiological function during youth is a lower threshold for system failure in old age, or a female ‘fertility–frailty pleiotropy’, where anticipation of childbirth and rearing children might lead to greater physiological reserves in women. The editorial explores other areas of uncertainty about frailty, including its assessment in clinical practice, underlying pathophysiology and potential modification by exercise, nutrition and other strategies to reduce the accumulation of deficits.

Pedestrian crossings and older people

Older pedestrians have a higher risk of death or serious injury in road traffic accidents than younger people, due in part to slower walking. It is therefore important that they are able to cross the road safely, if they are to gain the health benefits of regular outdoor exercise and avoid social isolation. Previous studies have demonstrated that most pedestrian crossings allow insufficient time for older people to cross the road safely. A short report investigates walking speed in older people in the UK and compares it with the speed needed to negotiate pedestrian crossings (pp. 690–694). The authors investigated a random sample of community-dwelling older people (1,701 women and 1,444 men aged 65 years and above), who took part in the Health Survey for England. Walking speed was measured by a timed walk of 8 feet at normal pace. They report that 84% of men and 93% of women had a walking speed slower than that required to use a pedestrian crossing (<1.2 m/s) or were unable to complete the test. Predictors of walking impairment were increasing age, female gender, lower socio-economic status, poor health and low grip strength. A press release coinciding with the online publication of this paper generated massive media coverage, including BBC TV and radio, the Daily Mail and Daily Telegraph. Whether this has the desired effect of influencing public policy remains to be seen!

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