Editor’s View

Sarcopenia is characterised by a reduction in muscle mass and strength, but is associated with morbidity, disability, poor quality of life, increased healthcare costs and excess mortality. It has been estimated that the prevalence of sarcopenia in people aged >65 years is 6–15%, but it may be as high as 50% above the age of 80 years. From my own perspective of musculoskeletal disease, there is growing interest in the relationship between the loss of muscle mass and the development of osteoporosis, falls and fragility fractures. It is therefore timely that this issue contains a Consensus Report from the European Working Group on Sarcopenia in Older People (pp. 412–423). The Working Group included representatives from the European Geriatric Medicine Society, the European Society for Clinical Nutrition and Metabolism, the International Association of Gerontology and Geriatrics—European Region and the International Association of Nutrition and Aging. The report is comprehensive, covering the definition and pathogenesis of sarcopenia and its relationship to cachexia, frailty and obesity. It also reviews the assessment of muscle mass, strength and function and diagnostic criteria for sarcopenia. Unfortunately, there are few clinical trials examining potential treatment for sarcopenia. It is therefore helpful that the Report concludes by discussing treatment outcomes for research and the challenges of managing the condition. Hopefully, this Report will stimulate interest and awareness of sarcopenia as well as stimulate further research work in this area.

There has been longstanding interest among the general public and in the lay media in dehydroepiandrosterone (DHEA) as an ‘elixir of youth’. This is reflected in the marketing on the internet of DHEA for weight loss, muscle gain, increased libido and improved sense of well-being. A research paper reports the results of a randomised controlled trial of DHEA on cardiovascular risk factors in 99 older women with low DHEA levels and at least one of Fried’s five criteria for frailty (pp. 451–458). During the 6-month study, DHEA treatment resulted in a significant increase of 38% in oestradiol and 248% in testosterone. There was also a 12% reduction in sex hormone-binding globulin, which would have led to a greater increase in free oestradiol and testosterone. Despite these changes in sex steroid concentrations, there was no significant change in cardiovascular risk factors. Interestingly, the authors performed dual X-ray absorptiometry measurement of body composition and presumably bone mineral density in the participants in this study, but we will have to wait for a publication elsewhere to learn about the effects of DHEA on bone density, muscle mass and other markers of frailty.

The Hypertension in the Very Elderly Trial (HYVET) has had a major impact on the management of hypertension in older people, but has also provided a framework for research into outcomes as diverse as dementia and fractures. The latest paper from HYVET examines the relationship between depression and the risk of developing cardiovascular disease and dementia (pp. 439–445). A total of 2,656 participants in HYVET completed the Geriatric Depression Score (GDS) annually. A third of the participants had a GDS score ≥6 at baseline, and during an average 2.1 years of follow-up, this was associated with increased cardiovascular mortality, strokes and all cardiovascular events. There was also a relationship between GDS at baseline and the risk of developing dementia. Despite the limitations of the study acknowledged in the discussion, it highlights that depression is common in people aged >80 years and that it may be associated with adverse effects on cardiovascular disease and cognitive function.

Body mass index (BMI) is commonly used in clinical practice to classify people as obese, overweight, of normal weight or underweight relative to their height. It is also widely used in epidemiological studies to establish the prevalence of obesity in different populations and investigate the relationship to adverse outcomes such as cardiovascular disease. BMI is often calculated using self-reported weight and height, yet previous studies suggest that people underestimate their weight and overestimate their height. The loss of height with advancing age may potentially increase the overestimation of height in older people. A research paper reports the results of a 20-year longitudinal Swedish study investigating the accuracy of self-reported weight, height and BMI calculated from these estimated measurements, compared with actual measurements in 774 community-dwelling older men and women (pp. 445–451). Overall, the participants underestimated their weight by 0.5–1.7 kg and overestimated their height by a mean of 0.9–1.2 cm. The difference between self-reported and measured BMI and height increased significantly with ageing, but this was not the case for weight. Reassuringly, the underestimation of BMI from self-reported weight and height was relatively small, with a mean value of 1.0 kg/m² in older subjects. The findings of this study relate particularly to epidemiological research, so these may not necessarily be as relevant to clinical practice.

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