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LETTER TO THE EDITOR

Cross-sectional studies and methodology: reply to comment by Erkoyun

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Dear Editor,

The aim of our study [1] was to compare two recently published consensus diagnostic criteria for sarcopenia [2, 3] and establish differences in prevalence according to each of these. We determined the prevalence of sarcopenia and osteopenia at baseline in a prospective cohort of women who voluntarily participated in a randomised controlled vitamin D and exercise (DEX) trial for falls prevention (NCT00986466). The DEX trial protocol has been described in detail elsewhere [4]; we urge readers to refer to this paper for methodological details if so required.

The sample size and power calculations have been estimated for the primary outcome of the DEX trial, i.e., the rate of falls [4]. All 70- to 80-year-old women living in the city of Tampere, Finland (n=9,370) were invited by letter to participate in the DEX trial. One thousand two hundred thirteen responders were screened for inclusion and ultimately 409 community-dwelling, independently living women were included in the study group after determining their eligibility according to the inclusion criteria and medical screening by a physician. As discussed in our paper [1], women with marked decline in basic activities of daily living, cognitive impairments, or certain degenerative conditions were excluded according to study criteria. Thus, by reading our paper it should become clear that we did not attempt to determine the prevalence of sarcopenia or osteopenia in the general Finnish population of older women.

Our study showed that diagnostic criteria for sarcopenia need to be standardised and consistently applied before they can be deemed worthy of comparison. Furthermore, in our study population muscle mass and derived indices of sarcopenia were not related to measures of physical function. We therefore proposed that rather than measuring muscle mass, an appropriate and standardised functional ability test battery might be better suited to detect changes in physical function and consequently, reveal the onset of disability.

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