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70 PREVALENCE OF SARCOPENIA IN A LONGITUDINAL UK COHORT STUDY USING EWGSOP2 CRITERIA VARIES WIDELY DEPENDING ON WHICH MEASURES OF MUSCLE STRENGTH AND PERFORMANCE ARE USED

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Background: The European Working Group on Sarcopenia in Older People 2 (EWGSOP2) guidelines have recently been published to aid diagnosis of sarcopenia in the clinical setting and to allow for better comparison between research studies. The guidelines recommend several different tests for diagnosing sarcopenia. We hypothesised that the prevalence of sarcopenia might vary depending on which tests are used.
Methods: We used data from Wave 3 of the Lothian Birth Cohort 1936 study, a longitudinal ageing study of healthy, community dwelling older adults (n= 697, 52% men, mean age 76y), to assess the prevalence of sarcopenia using the suggested cut-offs in the EWGSOP2 guidelines. Probable sarcopenia was defined as low muscle strength (measured by handgrip strength and 5x chair stand test), confirmed sarcopenia was defined as low muscle strength + low lean mass (measured by bioimpedance analysis), and severe sarcopenia was defined as confirmed sarcopenia + low muscle performance (measured by gait speed and short physical performance battery score). SPSS version 24.0 was used for statistical analysis.
Results: The maximum prevalence of probable sarcopenia was 24.2% in men and 24.8% in women, of confirmed sarcopenia was 7.4% in men and 11.0% in women, and of severe sarcopenia was 4.6% in men and 5.9% in women, when either of the cut-offs for muscle strength +/- muscle performance were met. When using only one measure of muscle strength +/- performance, rates of probable sarcopenia ranged from 7.7% to 21.1% in men and 5.9% to 21.3% in women; rates of confirmed sarcopenia ranged from 3.9% to 5.3% in men and 5.1% to 9% in women; and rates of severe sarcopenia ranged from 1.4% to 3.9% in men and from 2.0% to 5.1% in women.
Conclusions: In a UK-based longitudinal ageing study we found that the prevalence of probable, confirmed and severe sarcopenia varied widely using the EWGSOP2 guidelines depending on which identifying tests were used. We found that the cut-off points suggested for some of the measures in the guidelines are not comparable and may lead to differing groups being identified as sarcopenic between different trials. We suggest modification of the cut-offs to adjust for this.