



Original article

Sarcopenia and malnutrition in acutely ill hospitalized elderly: Prevalence and outcomes



Anna Paola Cerri ^a, Giuseppe Bellelli ^{a, b, c, *}, Andrea Mazzone ^a, Francesca Pittella ^a, Francesco Landi ^d, Antonella Zambon ^e, Giorgio Annoni ^{a, b, c}

^a Department of Health Sciences, University of Milano-Bicocca, Italy

^b Geriatric Clinic, San Gerardo Hospital, Monza, Italy

^c Milan Center for Neuroscience (Neuro-Mi), Milan, Italy

^d Department of Gerontology and Geriatrics, Catholic University of Sacred Heart, Roma, Italy

^e Department of Statistics and Quantitative Methods, Unit of Biostatistics, Epidemiology and Public Health, University of Milano-Bicocca, Milano, Italy

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SUMMARY

Background & aims: Data about the prevalence of sarcopenia among hospitalized patients is lacking and it is unclear whether the diagnostic criteria commonly used in community-dwellers is applicable in acutely ill subjects.

The aims of this report are: (i) to assess the prevalence of sarcopenia among hospitalized patients; (ii) to assess whether the European Working Group on Sarcopenia in Older People (EWGSOP) criteria are applicable in an acute care setting; and (iii) to assess the mortality rate at 3 months.

Methods: 103 patients admitted to the Acute Geriatric Clinic were enrolled. Inclusion criteria were: age ≥ 65 years and malnutrition or risk of malnutrition, according to the Mini Nutritional Assessment Short Form. Sarcopenia was diagnosed using the EWGSOP criteria by means of bioimpedance analysis, handgrip strength and gait speed, within 72 h of admission. Information on deaths was obtained by telephone interview at 3 months following discharge.

Results: Sarcopenia was diagnosed in 22 patients (21.4%). Twenty-three patients (22.3%) were not able to perform the gait speed and/or the handgrip strength because bedridden or requiring intensive treatments. In this group, a definite diagnosis of sarcopenia was not possible, lacking at least one EWGSOP criteria. Eleven (10.7%) patients died within the 3 months post-discharge period. Kaplan–Meier survival curves showed that sarcopenic patients died significantly more frequently than others (log-rank $p \leq 0.001$).

Conclusions: In a population of hospitalized elderly malnourished or at risk of malnutrition, sarcopenia is highly prevalent and associated with an increased risk to die in the short-term. Furthermore, the EWGSOP criteria cannot be satisfactorily applied in a relevant proportion of patients.

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1. Introduction

Sarcopenia is a loss of muscle mass and strength and/or reduced physical performance which is associated with an increased risk of incident disability, falls, all-cause mortality and increased health-care costs [1–4]. Estimates of the prevalence of sarcopenia in

older subjects worldwide vary from 3% to 30% according to the operational definition implemented and to the settings considered in the studies [5–7].

In 2010, the European Working Group on Sarcopenia in Older People (EWGSOP) has published a consensus definition based on the measurement of lean mass, grip strength and gait speed, stating that low lean mass and either low grip strength or slow gait speed are required to make the diagnosis [1]. One year later, the International Working Group on Sarcopenia (IWGS) suggested that a diagnosis of sarcopenia could be obtained on the basis of low gait speed and an objectively measured low muscle mass [8]. In the same year, another consensus conference [9] reinforced the same

* Corresponding author. Department of Health Sciences, University of Milano-Bicocca, via Cadore 48, 20900 Monza, MB, Italy. Tel.: +39 039 233 3475; fax: +39 039 233 2220.

E-mail address: giuseppe.bellelli@unimib.it (G. Bellelli).