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LETTER TO THE EDITOR

Letter to the Editor concerning "Analysis of skeletal muscle mass in women over 40 with degenerative lumbar scoliosis" by Eguchi Y, et al. (Eur Spine J; 2018: https://doi.org/10.1007/s00586-018-5845-0)

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Dear Editor,

We have read the article entitled "Analysis of skeletal muscle mass in women over 40 with degenerative lumbar scoliosis" by Eguchi and colleagues [1]. They investigated sarcopenia in both degenerative lumbar scoliosis (DLS) and healthy subjects among middle-aged and elderly female patients over 40 years old. The present study is particularly important as there are few studies that have explored the involvement of sarcopenia in the development of DLS. However, we would like to take an attention on some methodological points.

The first point is that body composition analysis was determined by bioelectrical impedance model InBody 720 Biospace device (Biospace Co, Korea) in this study. The bioimpedance analysis (BIA) systems depend on the measurement of electrical energy conduction capacity of hydrated tissues of body [2]. Total body water can be easily affected by medications (like diuretics), exercise, time of day, food or beverage or alcohol intake. Moreover, performing the test during the time of menses is essential for ladies. So, pretest protocol should be done via standard manner to avoid potential effects of total body water changes. But there is no clear evidence about such pretest protocol in the article. Pre-measurement protocol of this study needs to be detailed.

The second point is that Eguchi and colleagues classified their enrollees into two as sarcopenic and non-sarcopenic based on the measurement of appendicular skeletal muscle mass. In accordance with the European Working Group on Sarcopenia in Older People (EWGSOP) and The Asian Working Group for Sarcopenia (AWGS) consensus, sarcopenia was defined as low muscle mass, plus low muscle strength and/or low physical performance [3, 4]. Eguchi and collogues do not report results for the muscle function of patients. In view of appendicular muscle mass, this may be more relevant to classify the subjects as pre-sarcopenic rather than sarcopenic. So, the assignment of sarcopenia seems to be suboptimal in this study.

We believe that identifying the impact of such a potential misclassification on the results might help to generate current results in daily practice.

Author contributions Dr. Vildan Binay Safer drafted the letter and Dr. Umut Safer performed a critical review of the article.

Compliance with ethical standards

Conflict of interest No conflict of interest.

References

1. Eguchi Y, Toyoguchi T, Inage K, Fujimoto K, Orita S, Suzuki M, Kanamoto H, Abe K, Norimoto M, Umimura T, Sato T, Koda M, Furuya T, Aoki Y, Nakamura J, Akazawa T, Takahashi K, Ohtori S (2018) Analysis of skeletal muscle mass in women over 40 with degenerative lumbar scoliosis. Eur Spine J. https://doi.org/10.1007/s00586-018-5845-0
2. Ward LC (2012) Segmental bioelectrical impedance analysis: an update. Curr Opin Clin Nutr Metab Care 15:424–429
3. Cruz-Jentoft AJ, Baeyens JP, Bauer JM, Boirie Y, Cederholm T, Landi F, Martin FC, Michel JP, Rolland Y, Schneider SM, Topinková E, Vandewoude M, Zamboni M (2010) European Working Group on Sarcopenia in Older People. Sarcopenia: European

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consensus on definition and diagnosis: report of the European Working Group on Sarcopenia in Older People. Age Ageing 39:412–423

4. Chen LK, Liu LK, Woo J, Assantachai P, Auyeung TW, Bahyah KS, Chou MY, Chen LY, Hsu PS, Krairit O, Lee JS, Lee WJ, Lee Y, Liang CK, Limpawattana P, Lin CS, Peng LN, Satake S, Suzuki T, Won CW, Wu CH, Wu SN, Zhang T, Zeng P, Akishita M, Arai H (2014) Sarcopenia in Asia: consensus report of the Asian Working Group for Sarcopenia. J Am Med Dir Assoc 15:95–101