LETTER TO THE EDITOR

Comment on "Sarcopenia is a prognostic factor for overall survival in elderly patients with head-and-neck cancer"

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Dear Editor,

We have recently read with great interest the article by Chargi et al. which was titled "Sarcopenia is a prognostic factor for overall survival in elderly patients with head-and-neck cancer". In the article, Chargi et al. concluded that sarcopenia is associated with impaired overall survival in elderly head-and-neck squamous cell carcinoma (HNSCC) patients [1]. We found these results particularly important as the authors reported that their study was the first to investigate the relationship between sarcopenia, as defined by the combination of low skeletal muscle mass and muscle function, and adverse outcomes in HNSCC patients. Despite the importance of the study, we would like to take an attention on some methodological issues.

First, the study reported the results of HNSCC patients between April 2015 and February 2018. This particular long study period, in the retrospective design, might have resulted in variable scanner use in study period. This point is so critical due the variation of attenuation between individual scanners might easily affect the current results [2]. Therefore, Chargi et al. should clarify whether all measurement reported in the study was observed from one or more computed tomography (CT) scanner.

Second, European Working Group on Sarcopenia in Older People 2 (EWGSOP2) consensus, which was revised 2018, reported that muscle strength was better than muscle mass in predicting adverse outcomes [3]. Chargi et al. determined low handgrip strength (HGS) if the HGS < 30 kg for men or < 20 kg for women. However, EWGSOP2 consensus reported that low HGS as < 27 kg (men) or < 16 kg (women). Therefore, this approach might easily result with mis classification of patients.

The last but not least, Chargi et al. reported skeletal muscle mass measurement as cross-sectional muscle area (CSMA) on pretreatment CT or magnetic resonance imaging (MRI) of the head-and-neck area at the level of the third cervical vertebrae (C3). Validation of this methodology in current article was reported by citing article by Swartz et al. [4]. Using CSMA measurement at the level of C3 in trials requires validation of this measurement technique against gold standards, i.e., whole-body MRI scans. However, the study by Swartz et al. was not a validation study. To the best of our knowledge, CSMA measurement at the level of C3 has not validated against gold standards. In this content, we are not sure whether muscle mass measurement in article by Chargi et al. is accurate.

We believe that considering the impact of such a potential misclassification on the results might help to generate current results in clinical practice and improve the method of future studies in HNSCC.

Compliance with ethical standards

Conflict of interest No conflict of interest.

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