The ‘True’ Definition of Sarcopenia?

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The publication by Mercan et al. [1], in the April 2020 issue of the journal, is an interesting study on the relevance of sarcopenia in patients with gastrointestinal (GI) cancers. This study, which is retrospective, found sarcopenia to be associated with increased postoperative complications following elective surgery for GI cancers. Like most other studies, the authors defined sarcopenia as the lowest quartile of the malignancy cohort. This is debatable as malignancy contributes to loss of muscle mass and worsening muscle quality, the better three quartiles of the cohort cannot be called “normal.” The Asian Working Group for Sarcopenia, in 2014, laid down definitions stating that sarcopenia using muscle mass should be defined as values less than 2 standard deviation below the mean muscle mass of a young reference group or the lower quintile of the same [2]. Therefore, comparison of muscle indices would be better made with a cohort of “normal” individuals. While it is intuitive that sarcopenic patients would fare worse than others, this has actually not been consistently proven, possibly because of discordant definitions of sarcopenia used across studies.

In the same context, the authors have concluded that patients in the lowest quartile of muscle indices developed more life-threatening complications. These results need to be assessed in the light of how we “define” this entity. Besides, each major abdominal surgery has a different complication profile; it may not be fair to club all the operations and their outcomes together.

Having stated that, furthering research in this field may help us identify scenarios in which interventions (e.g., prehabilitation, nutrition, and exercise therapy) can be undertaken to modify outcomes where feasible [3]. However, we will first have to learn to define sarcopenia for a population, using data of the same country, in a cohort of “normal” individuals to get meaningful lessons.

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