

Review of: "[Review] Sarcopenia in Coronavirus Disease (COVID-19): All to Know from Basic to Nutritional Interventions from Hospital to Home"

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Potential competing interests: No potential competing interests to declare.

Dear Editor,

I hope this letter finds you well. I have reviewed the manuscript titled "Sarcopenia in COVID-19: Pathways, Impacts, and Treatment Considerations" and I would like to provide my feedback and evaluation of the manuscript.

General Assessment: Overall, the manuscript addresses an important topic and provides a comprehensive review of the link between sarcopenia and COVID-19, highlighting the impact on patient outcomes and the potential mechanisms involved. The manuscript also discusses the importance of early assessment and intervention to prevent and manage sarcopenia in COVID-19 patients. The structure and flow of the manuscript are generally well-organized, making it easy to follow the key points. However, there are some areas that need improvement, as outlined below.

Major Comments:

Clarity and Language:

- The language and writing style in some parts of the manuscript need improvement to enhance clarity. There are instances where the sentences are overly complex and could be simplified for better understanding. I recommend revising these sections to ensure clarity without sacrificing scientific rigor.

Introduction:

- The introduction provides a good overview of the importance of addressing sarcopenia in COVID-19 patients. However, it would be helpful to include more recent statistics on COVID-19 cases and deaths to reflect the current state of the pandemic.
- The introduction could benefit from a clearer statement of the objective or aim of the review. What specific questions or gaps in knowledge does this review seek to address?

Mechanism of COVID-19 and Sarcopenia:

- The section describing the mechanism of COVID-19 and sarcopenia is well-presented, with a focus on the inflammatory response, hormonal changes, and malnutrition. However, it would be helpful to provide more specific

references and evidence supporting these mechanisms. Including relevant citations will strengthen the scientific basis of the manuscript.

Sarcopenia Assessment:

- The section on sarcopenia assessment provides a good overview of the available tools and criteria for diagnosing sarcopenia in COVID-19 patients. However, it would be beneficial to provide more details on the strengths and limitations of each tool, including their sensitivity and specificity in different populations. Additionally, incorporating recent research on novel assessment methods or biomarkers for sarcopenia would enhance the discussion.
- There is a novel technique called EIM(electrical impedance myography) for assessing muscle composition, which is associated with sarcopenia. I suggest to add information about EIM in this part of your review article.

Nutrition:

- The section on nutrition and its role in preventing and managing sarcopenia in COVID-19 patients is well-documented. However, it would be helpful to provide specific recommendations for energy and protein requirements during hospitalization, considering the increased needs in these patients. Including practical strategies for nutritional intervention, such as the use of oral intake or enteral feeding, would also be valuable.

Minor Comments:

Conclusion:

- The conclusion provides a concise summary of the main points discussed in the manuscript. However, it would be beneficial to include a brief discussion of the implications of the findings and potential future directions for research and clinical

Best wishes,

AK, M.D