

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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This is a very interesting review focusing not on the pathogen but on the population with direct and indirect effects on the muscle that leads to sarcopenia. I see this article with an impact on sarcopenia awareness but a potential to also lead to further research in diagnosis and treatment.

I do have the following observations:

- 1. Multiple grammar mistakes should be revised carefully.
- 2. Sarcopenia, as mentioned in the review, is more than a disease a condition that is multifactorial by nature, with many risk factors before the disease, some that are attributable; nevertheless, no causation can be proven unless viral myositis and lastly, as a sequela of the disease. ICU patients with certain pharmacologic treatments can also have worse muscle outcomes than critical care patients without these pharmacological interventions.
- 3. A sarcopenic patient with COVID-19 has a higher risk of complications before hospitalization.
- 4. Sarcopenia is not a steady state but a dynamic and delicate state easily exacerbated by ICU care or insufficient nutrition. Not sure if I would name sarcopenia a co-disease but a disorder that concomitantly presents a consequence or a prior risk factor.
- 5. Social isolation derived from governmental plans to lower COVID-19 led to an immediate decrease in physical activities in most people. To date, and although not proven, how much has this increased the prevalence of sarcopenia?
- 6. I agree with scales being underused and certain limitations in critical care patients. Did you find any other form of improving diagnosis?
- 7. Eating complications are considered gastrointestinal symptoms of COVID-19 while eating disorders are more commonly seen as bulimia or anorexia.
- 8. How can sarcopenia be approached at different ages? Sarcopenia has been well-studied in ageing populations but not in younger patients. Additional socioeconomic problems can also be further addressed. I can imagine different prevalence in regions and patients with different comorbidities.
- 9. I do have a problem with the depression section. Depression cannot be acutely diagnosed in a recent hospitalization, with the stress and anxiety that can be derived just from being diagnosed with COVID-19. Are there any associations with depression leading to sarcopenia or vice versa?



10. More emphasis can be made on sarcopenic rehabilitation and sarcopenic-specific nutrition. The title suggests that more nutritional interventions would be reviewed, such as plan, monitorization, calendarization of plans, physical rehabilitation, gastrostomy versus nasogastric tube, and supplements. I would suggest that this be considered to enrich this review further.