

CORRESPONDENCE

Re. “Effect of Low Skeletal Muscle Mass on Post-operative Survival of Patients With Abdominal Aortic Aneurysm: A Prognostic Factor Review and Meta-Analysis of Time to Event Data”

Antoniou *et al.* are to be commended for drawing together the results of the current literature on the potential role of sarcopenia following abdominal aortic aneurysm (AAA) repair.¹ They analysed the effects of low skeletal muscle mass (SMM) on outcomes after elective open and endovascular AAA repair.

Several methodological challenges were highlighted in the paper; however, attempts to address these were limited. The authors derived hazard ratios from survival curves or log rank tests for meta-analysis. Therefore, the results were unable to be adjusted for confounding variables, specifically age, sex, and height, which have been shown to influence both muscle mass and outcomes after AAA repair.

Similar to previous findings, the meta-analysis found that those with low SMM were significantly older.^{1–3} Therefore, the conclusions derived may reflect an older cohort and should not be generalised. SMM has also been shown to be lower in women, who incidentally, have a higher mortality after AAA repair. However, only three studies included in the analyses stratified groups according to sex.^{3–5} This may have resulted in a higher proportion of women in the low SMM group, which raises further questions about the generalisability of the conclusions reached. Furthermore, the heterogeneity in the standardisation of measurements, namely by height, of SMM has also not been addressed. It remains ambiguous whether there is a need to standardise measurements as opposing results were reported by studies using standardised and non-standardised measurements of SMM.^{3,6,7} Acquiring data sets from the respective authors and performing a uniform analysis to minimise methodological variations would have enabled meaningful interpretation of heterogeneous data.

The apparent reduced survival with low SMM may be explained by these methodological limitations; therefore, the results should be interpreted with caution.

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Understanding Sarcopenia: 10 Types of People

“There are only 10 types of people in the world: those who understand binary, and those who don’t.”

Mathematical joke

Thank you for the opportunity to respond to the letter by Jones and Waduud. Our colleagues made some excellent points that we would like to respond to and comment on. It seems that the problem is conceptual rather than methodological.

Firstly, we would like to emphasise that our goal was to assess the skeletal muscle mass (or a surrogate marker thereof), not sarcopenia, as a prognostic factor.¹ We tried to be consistent with correct terminology despite source