Does Obesity Affect Outcomes in Patients Undergoing Esophagectomy for Cancer? Comments on a Meta-analysis

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Dear Editor,

Kayani et al. [1] performed a meta-analysis about the effect of obesity on outcomes after esophagectomy for esophageal squamous cell carcinoma or adenocarcinoma. This is an important topic because of the rise of obesity incidence in the world's adult population and because of the association between obesity and the development of chronic diseases.

The authors compared obese and nonobese patients, and they defined R0 resection, postoperative complications, postoperative mortality, and long-term survival as outcomes of interest. The results of the meta-analysis showed better long-term survival in obese patients than in nonobese patients, whereas postoperative complications and mortality were not significantly different between the two groups. The authors also suggested the role of diabetes to increase the risk of some postoperative complications.

The study search and study selection procedures were adequate, as well as the definition of exclusion criteria; nevertheless, the study had some limitations that Kayani et al. frankly discussed.

However, keeping in mind those limitations while reading the results, we think that the conclusions about survival and complications should have been different due to two important weak points. The first weak point is the heterogeneity—in terms of BMI—of “nonobese” group; in fact, Kayani et al. grouped overweight, normal weight, and underweight patients (these due to Grotenhuis et al. [2]) in the nonobese group. In this way, overweight and

underweight patients could have affected the outcome results (especially overall survival) of normal weight ones, leading to incorrect conclusions.

The second weak point is the possible confounding effect of patients' characteristics, because some of the papers used in the meta-analysis showed significant differences among BMI groups (obese, overweight, normal weight, underweight) in terms of histology, pathological T stage, and neoadjuvant therapy. Kayani et al. included this facet in the limitations section, but they presented the results of the comparisons anyway.

In conclusion, we think that the comparison between obese subjects and normal weight ones could have been a better choice. In addition, the lack of homogeneity—in terms of possible confounders—in BMI groups should have been addressed as the reason for interrupting the meta-analysis and for concluding that literature data were not useful for the purpose of the paper.

Conflict of interest None

References

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