

Consensus guidelines for thoracic surgical patient management—do they represent the consensus?

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Definitive surgery for esophageal cancer is associated with a high rate of postoperative complications. For instance, in the NSQIP database (2008 to 2017), the average rate of 30-days mortality and overall morbidity after a 3-field esophagectomy (CPT 43112) is 2.7% and 47.4%. Further, pulmonary complications (pneumonia, prolonged intubation and reintubation within 72 hours) occur with a rate of 26.0%, and infectious complications (superficial, deep, organ space surgical site infections, dehiscence, sepsis) occur with a rate of 23.6%. These are 2.6%, 42.3%, 23.1%, and 16.8% after Ivor Lewis esophagectomy (CPT 43117), and 2.5%, 44.0%, 25.1%, and 22.0% after transhiatal esophagectomy (CPT 43107) (1). Thus, these are one of the cruxes of esophagectomy.

In the accompanying publication, Yu et al. (2) present the "Society for Translational Medicine expert consensus on the prevention and treatment of postoperative pulmonary infection in esophageal cancer patients". They outline what they believe are key components of diagnosis, prevention, and treatment of pneumonia following surgery for esophageal cancer. The authors include surgeons representing 34 Departments of Thoracic Surgery in the People's Republic of China, one in the US, and one Department of Anesthesiology and Critical Care Medicine in the US. The Society for Translational Medicine was established in 2012 with the mission to "improve the survival and quality of life of patients". Its members hail from Australasia, Europe, North America, North Africa, and South America. It has cooperative groups in several disciplines, including lung cancer, thoracic surgery and critical care. The Society for Translational Medicine has

links to 16 published guidelines on its website, nine of which pertain to different aspects of thoracic oncologic surgery (3).

The authors are to be commended on forming the Society for Translational Medicine, facilitating expert discussion of this topic, and producing a set of guidelines for a challenging problem in thoracic and general surgery. Unfortunately, the manuscript does not provide the reader with any background on this society, how participants were recruited, and what steps were used to develop these guidelines, unlike similar publications (4,5). That missing information is important for authors to understand, and to allow them to opine on the manuscript.

Upon examination of the proposed guidelines, those of postoperative pneumonia are generic and derived from reasonable criteria for diagnosis of hospital acquired pneumonia. But unlike the comprehensive guidelines from the European Respiratory Society (ERS)/European Society of Intensive Care Medicine (ESICM)/European Society of Clinical Microbiology and Infectious Diseases (ESCMID)/ Asociación Latinoamericana del Tórax (ALAT) (6), those presented in the associated manuscript do not provide a comprehensive review of the data. While most of the guidelines to prevent postoperative pneumonia make sense, not all are supported by the literature. This leaves me wondering how these guidelines were developed. Nor do the authors remark on use of minimally invasive approaches to esophagectomy, which have been demonstrated to reduce postoperative pain and complications including pneumonia (7). For treatment of pneumonia, many of their recommendations are not supported with publications, and

some of their guidelines are unfamiliar. For instance, they recommend increasing fluids and treating with nebulized antibiotics, neither of which they provide supportive evidence for nor are they standard of care at institutions I'm familiar with. Therefore, I am left questioning the validity of some of the guidelines presented by the authors under the auspices of the Society for Translational Medicine.

I caution providers to use guidelines as just that guidelines—to help guide clinical decision making, and not replace it. They are useful for helping alert providers to patients who are deviating from desired treatment plans, but they do not replace clinical cognitive assessment. Some of the recommended preventative measures and treatments are not congruent with the standard of care at many institutions. Therefore, clinicians should rely on the resources they have assembled in their own practices to provide the best possible care for their individual patient populations. I commend the authors and the Society for Translational Medicine they represent for attempting to guide clinicians in management of challenging problem. However, I ask that with future guidelines, they provide more evidence to support their recommendations.

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Footnote

Conflicts of Interest: The author has no conflicts of interest to declare.

References

1. Meguid RA, Bronsert MR, Juarez-Colunga E et al.

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Surgical Risk Preoperative Assessment System (SURPAS): III. Accurate Preoperative Prediction of 8 Adverse Outcomes Using 8 Predictor Variables. Ann Surg 2016;264:23-31.

- Yu Z, Li S, Liu D, et al. Society for Translational Medicine Expert Consensus on the prevention and treatment of postoperative pulmonary infection in esophageal cancer patients. J Thorac Dis 2018;10:1050-7.
- 3. The Society for Translational Medicine. Available online: http://www.thestm.org/
- NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Non-Small Cell Lung Cancer Version 3.2019. Available online: https://www.nccn.org/ professionals/physician_gls/pdf/nscl.pdf
- Odell DD, Cooke DT, Meguid RA, et al. Thoracic Outcomes Research Network (ThORN) Consensus Measures of Lung Cancer Care: Results of a Modified Delphi Study. San Diego, USA: Oral presentation at the Society of Thoracic Surgeons 55th Annual Meeting, 2019.
- 6. Torres A, Niederman MS, Chastre J, et al. International ERS/ESICM/ESCMID/ALAT guidelines for the management of hospital-acquired pneumonia and ventilator-associated pneumonia: Guidelines for the management of hospital-acquired pneumonia (HAP)/ ventilator-associated pneumonia (VAP) of the European Respiratory Society (ERS), European Society of Intensive Care Medicine (ESICM), European Society of Clinical Microbiology and Infectious Diseases (ESCMID) and Asociación Latinoamericana del Tórax (ALAT). Eur Respir J 2017;50. doi: 10.1183/13993003.00582-2017.
- Yibulayin W, Abulizi S, Lv H, et al. Minimally invasive oesophagectomy versus open esophagectomy for resectable esophageal cancer: a meta-analysis. World J Surg Oncol 2016;14:304.