Commentary: A guide for what we know and what still needs to be learned

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Venous thromboembolism (VTE) following major cancer surgery is a relatively frequent and serious complication associated with a 5-fold increased mortality risk compared with patients undergoing cancer surgery without VTE.1,2 VTE ranks as the third most-common cause of cardiovascular deaths and the most-common preventable cause of in-hospital deaths.3 Among thoracic surgical oncology patients with VTE, the risk of death may be even more compelling, as a National Inpatient Sample series demonstrated mortality rates of nearly 14% and 20% in postesophagectomy and postlung resection patients with VTE, respectively.2 Moreover, published data indicate that patients with cancer undergoing major surgery have a significantly greater risk of VTE compared with surgical patients without cancer.4 Thus, measures to mitigate the occurrence of postoperative VTE in patients with cancer have become well-established components of clinical practice guidelines among major oncology, hematology, and even international groups.5-7 Until the current publication by Shargall and colleagues,8 a comprehensive evidence-based guide for VTE prevention specifically pertaining to the thoracic surgical oncology patient did not exist.

The VTE-prevention guidelines jointly produced by the European Society of Thoracic Surgeons and American Association for Thoracic Surgery is the first of its kind within our specialty but may not be the last. While a necessary guide, the authors are the first to note in the manuscript’s conclusion that quality data on this subject for thoracic surgical oncology patients are limited. Despite a meticulous review and thorough summary of existing literature, all 24 of the guideline’s recommendations were considered conditional, and all but 3 of the recommendations were judged as having low or very low certainty of supporting evidence. This challenge is not exclusive to our specialty. The 2019 VTE clinical practice guidelines by the American Society of Clinical Oncology include 22 recommendations, of which close to one half are categorized as having low, low-intermediate, or insufficient data quality.5 A more recent publication by the American Society of Hematology reported similar level of evidence for their recommendations.6

Considering a substantial portion of our thoracic surgery patients carry a diagnosis of cancer, understanding how to optimize VTE prevention is vital. Although many of the recommendations are common practice for most thoracic surgeons, guidelines help to enforce a standard of care. But perhaps the most important guidance provided by this document relates to areas in which knowledge is lacking and attention is needed. Do we know whether preoperative compared with postoperative pharmacologic prophylaxis is essential, particularly in patients receiving preoperative thoracic epidurals? Are there good data indicating certain high-risk thoracic surgical oncology patients should be protected more aggressively? Can we predict which of our patients will be among the 30% to 40% of VTE diagnosed after hospital discharge?9,10 Based on these guidelines, the answer to these questions is no. But now, at least we know what we don’t know.

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CENTRAL MESSAGE
The first VTE prevention guide for thoracic surgical oncology patients summarizes what is known and what must still be learned.
References