EDITORIAL – THORACIC ONCOLOGY

Annals of SURGICALONCOLOGY OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY



Is Less Really More? Sublobar Resection in the Elderly

Brian Mitzman, MD, FACS, FCCP 💿

Division of Cardiothoracic Surgery, University of Utah Health, Salt Lake City, UT

One of the most widely debated topics in the field of thoracic surgery is currently the role of sublobar resection for primary lung cancer. After years of waiting, we have data from JCOG0802 and CALGB140503, and sides are actively being chosen.^{1,2} Do the data hold up? Is segmentectomy, and possibly even wedge resection, oncologically equivalent to lobectomy for early-stage non-small cell lung cancer? There has yet to be consensus. In the meantime, additional observational studies analyzing various subcohorts for the benefit of lung-preserving resection are being performed and adding more fuel to the fire.^{3,4}

In this month's *Annals of Surgical Oncology*, Wu and colleagues retrospectively reviewed 164 patients aged 75 years or more with tumors less than 2 cm and a consolidation tumor ratio of less than 1.⁵ These patients were operated on at one of two high-volume centers in China over a 2-year period and received either lobectomy or a sublobar resection. Of the sublobar group, 83.5% received only a wedge resection. Using a 1:1 propensity match, 67 pairs were created. The authors found that lobectomy led to a longer operative time (160 versus 102 min), but similar complication, recurrence, and survival rates. Their ultimate conclusion is that, in the elderly, sublobectomy could have superior perioperative outcomes and equivalent oncologic efficacy.

The authors need to be commended for a well-done study and adding to the clinical literature trying to answer the lobectomy versus segmentectomy debate. Readers need to understand several key points about this study, however. First, as a retrospective analysis from just two centers with a small sample size, the results may not be generalizable to all regions and institutions. Secondly, there were very few segmentectomies in this analysis (only 16 in total, and just 10 in the propensity match). It is essentially an analysis of wedge resection versus lobectomy. Therefore, one should not be surprised that the operative time is lower in the sublobar group. As with any retrospective study, selection bias cannot be accounted for, as there is normally an upfront reason why a patient is being offered a wedge resection rather than the standard lobectomy. Lastly, as we look at some of the matched results, the number of resected lymph nodes was low (median of eight in the lobectomy group and one in the sublobar group), which would not meet recommended standards at most institutions in North America and may affect clinical outcomes.⁶

My takeaway from this study is a bit different. I see a group of elderly patients who underwent recommended formal lobectomy. With only a slight increase in operative time over wedge resection, there were similar postoperative outcomes. While the debate on overall oncologic outcomes is still being decided by randomized trials, this study shows us that the short-term outcomes for lobectomy are similar to wedge resection even in the elderly.

DISCLOSURE Proctor and consultant; Intuitive Surgical.

REFERENCES

 Saji H, Okada M, Tsuboi M, et al. Segmentectomy versus lobectomy in small-sized peripheral non-small cell lung cancer (JCOG0802/WJOG4607L): a multicenter, open label, phase 3, randomized, controlled, non-inferiority trial. *Lancet*. 2022;399:1607–17.

[©] Society of Surgical Oncology 2022

First Received: 22 November 2022 Accepted: 22 November 2022 Published Online: 5 December 2022

B. Mitzman, MD, FACS, FCCP e-mail: brian.mitzman@hsc.utah.edu

Altorki NK, Wang X, Kozono D, et al. PL03.06 Lobar or sub-lobar resection for peripheral clinical stage IA = 2 cm non-small cell lung cancer (NSCLC): results from an international randomized phase III trial (CALGB 140503 [Alliance]). *J Thorac Oncol.* 2022;17(9):S1-2.

- Kamel MK, Lee B, Harrison SW, Port JL, Altorki NK, Stiles BM. Sublobar resection is comparable to lobectomy for screen-detected lung cancer. J Thorac Cardiovasc Surg. 2022;163(6):1907–15.
- 4. Kneuertz PJ, Abdel-Rasoul M, D'Souza DM, et al. Wedge resection vs lobectomy for clinical stage IA non-small cell lung cancer with occult lymph node disease. *Ann Thorac Surg.* 2022. h ttps://doi.org/10.1016/j.athoracsur.2022.08.044.
- 5. Wu S, Wang Z, Sun J, et al. Survival outcomes of sublobectomy and lobectomy in elderly patients with peripheral solid-dominant

non-small cell lung cancer. Ann Surg Oncol. 2022. https://doi.org/ 10.1245/s10434-022-12909-y.

 Yun JK, Lee GD, Choi S, et al. Clinical significance of regional lymph node evaluation during sublobar resection in lung cancer. *Ann Thorac Surg.* 2022;114(3):989–97.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.