function tests, should be essentially 0, the major complication rate should be less than 5% to 7%, the conversion rate 1% to 2%, and the length of stay should be 1 to 3 days.[2] We should always remove five N2 and at least two N1 lymph node stations. If general thoracic surgeons all over the world really did this every day, if we together, like a highly functional team, encouraged each other with friendly competition, the value of surgery would rise. Our patients would do better. Most importantly, our patients with lung cancer would be more likely to live longer. And, you just can't beat that.

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See Article page 1639.

Commentary: When less is more for lung cancers

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CENTRAL MESSAGE

For patients with clinical stage I lung cancers >2 cm and ≤3 cm, segmentectomy shows promise as an oncologically sound option versus lobectomy and supports the idea that less is more.

"Less is more" is repeated almost habitually in many operating rooms as a reminder of sorts to ensure patients are not exposed to superfluous risks. When a thoracic surgeon considers pulmonary resection for a patient, all things being equal, a concerted effort goes toward preserving lung and maximizing postoperative pulmonary function to maximize beneficence while minimizing harm. One does not need to search too far for an example when considering that lobectomy supplanted pneumonectomy as the resection of choice for lung cancer. The reality is that things are not always equal in the ongoing controversy regarding performing a sublobar resection for lung cancer due to the risk of higher locoregional recurrence and decreased survival.[1,2] Chan and colleagues[3] provide evidence of clear noninferiority for segmentectomy when compared with lobectomy, adding more information to support segmentectomy for primary lesions >2 cm, which is a size not frequently considered for a lesser parenchymal resection.

Using a propensity-matched model and retrospective analysis, 90 pairs of segmentectomies and lobectomies were compared over 13 years for this unique cohort of patients with larger lesions. Patients undergoing segmentectomy demonstrated no difference in terms of perioperative outcome when compared with lobectomy. Outcomes such as cancer-related morbidity, recurrence, and mortality are equally important to a surgical series, and when the authors evaluated these outcomes no differences were noted. Furthermore, there was no difference in the incidence of cancer-related or other-

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cause deaths. The authors conclude that in appropriately selected patients with T1cN0 disease, segmentectomy is a viable alternative to lobectomy.

The authors acknowledge that the inherent limitations of their retrospective study prohibited knowing exactly what factors influenced the decision making regarding the selection to perform segmentectomy over lobectomy and thus may have allowed for selection bias. Additionally, not all segments are equal and they lend themselves to different levels of complexity during resection and variable surgical margins after resection. A possible objective for further study would be to analyze a segmentectomy cohort according to the specific type of segments resected.

This study, by world-renowned leaders in thoracic surgery at the University of Pittsburgh, is particularly noteworthy because it occupies a space that even the eagerly anticipated results from randomized controlled trials conducted in North America (CALGB 140503) and Japan (JCOG 0802/WJOG 4607L) are not designed to answer. Therefore, the authors should be congratulated for adding data regarding segmentectomy for a unique subset of stage I lung cancers that otherwise could have remained incompletely understood. Poet Robert Browning suggested that something modest, when possible and appropriate, is better than the excessive alternative.[4] Similarly, Modernist Architect Ludwig Mies van der Rohe put forth that a structure of less may in fact be more sophisticated.[5] As Chan and colleagues[3] describe, in the utilization of segmentectomy for patients with T1cN0 lung cancers, less truly is more.

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