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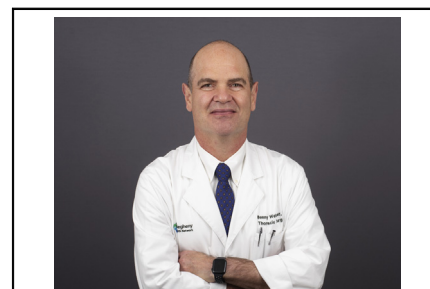


## Commentary: Preserving lung with resection and reconstruction of the secondary carina

Benny Weksler, MD, MBA

Parenchymal preservation is an important goal in lung surgery. A shift to segmentectomy instead of lobectomy is a good example. Segmentectomies carry less morbidity and similar oncologic outcomes.<sup>1</sup> Perhaps more influential is the use of sleeve bronchoplasty to avoid pneumonectomy in patients with lung cancer. Several studies confirmed that patients undergoing sleeve lobectomy have similar survival, lower operative morbidity, and mortality than patients undergoing pneumonectomy.<sup>2</sup> Preserving lung parenchyma may be more critical in patients with low-grade malignancies where expected long-term survival is relatively high.<sup>3</sup>

Chen and colleagues<sup>4</sup> present their experience with left secondary carinal resection and lung-sparing for low-grade malignancies. The experience draws from 2 centers, 1 in Italy and 1 in China. It describes 30 patients, the majority with adenoid cystic carcinoma or carcinoid tumors. Surgical results were good, with no surgical mortality and an acceptable rate of complications. A concerning aspect is the rate of positive margin. More than one-quarter of the patients had positive margins and were treated with postoperative radiation therapy. In a short follow-up period of 2.4 years, there were no recurrences. I am encouraged by the lack of early recurrences, but the authors' follow-up period is not adequate for low-grade malignancies. I would be curious to see an update to this work in a few years reporting on the 5-year disease-free survival. Although positive margins are a problematic aspect of this work, it is



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### CENTRAL MESSAGE

Resection of the secondary carina allows for lung preservation. Longer-term follow-up is needed to determine oncological outcomes.

undeniable that lung-sparing is a relevant issue for patients with low-grade malignancy. It is likely that a recurrence could still be salvaged with another surgical procedure. I encourage readers to check the video posted by the authors, which is excellent and demonstrates the surgical procedure.

Although all procedures in the series were performed by open surgery, I wonder if, with the advancement in robotic technology and increased minimally invasive proficiency of many surgeons, these complex procedures could be performed without big incisions. Many complex procedures, including double-sleeve lobectomies with vascular anastomosis, have been recently described using video-assisted thoracoscopic surgery<sup>5</sup> or robotics.<sup>6</sup> I suspect that in the near future, at least some of these procedures will be performed using minimally invasive techniques.

Chen and colleagues<sup>4</sup> offer another step forward for lung-sparing surgery. Although questions remain on the long-term oncologic outcomes of the secondary carinal resection and reconstruction, initial results are encouraging. The present report may assist other surgeons in performing these types of advanced procedures.

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