



# Upper lobe preservation is not a challenge

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*Response to:* Cohen C, Pop D, Benkirane T, *et al.* Upper lobe preservation in the treatment of centrally located NSCLC: one more challenge in lung-sparing surgery? *J Thorac Dis* 2018;10:6418-22.

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We have particularly appreciated the interesting letter from Cohen and colleagues (1) with their comments about our recent paper (2). They underline the importance of the use of lung-sparing operations for the treatment of NSCLC in order to avoid pneumonectomy. In particular, the latter authors confirm our suggestion that even a particular and challenging-considered operation such as lower sleeve lobectomy can provide good short and long term results (3-6). In our study (2), we stressed the aspect that left lower sleeve lobectomy and right lower bilobectomy should have been considered as a peculiar subset among sleeve resections in order to better investigate the outcome after this kind of reconstructive operations that, up to our paper, were usually included as very small number in wider series of bronchial and bronchovascular reconstruction patients.

In their letter, the authors show and discuss the interesting Okada classification (7) and the aspect that associated pulmonary artery reconstructions were not included in our series. Usually, tumours infiltrating the origin of the lower bronchus that require a lower sleeve come from B6; for this main reason, pulmonary artery infiltration is not frequent and culmen preservation is not the main issue but the risk of pneumonectomy. An attractive technical aspect is about the length of the main bronchial stump. In our experience, the risk of jeopardizing the vascularization in a careful resection phase is negligible. On the other hand, leaving the left main bronchial stump too short could add technical challenges for reconstruction phase due to the anatomy of the aortic arch. Many tips and tricks have been proposed to correct the calibre mismatch between the two bronchial stumps,

but our experience suggested that a complete or partial very meticulous interrupted suture can easily and successfully solves this problem. Initial experiences on sleeve resection included patients with cardiopulmonary impairment that could not undergo pneumonectomy. Over time, sleeve resection has gained more and more consensus and nowadays it should be offered, if possible and oncologically feasible, even to patients without any functional impairment. Our results in this series of patients seems to confirm the pathologic N2 status as the main factor affecting survival after sleeve lobectomy (5,6).

We are aware of the small number of patients included in our series over a long study period, however, we particularly thank Cohen and colleagues to have pointed out the fundamental characteristic of our study that makes it different from other papers in this setting: it is the first one giving specific post-operative and long-term information about Y sleeve resection, reporting satisfying technical and oncologic results.

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all

aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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