Robotic thoracic surgery: S1+2 segmentectomy of the left upper lobe: advantage of robotic assisted thoracic surgery

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We are grateful for the reviewers' comments on our manuscript entitled "Robotic thoracic surgery: S1+2 segmentectomy of the left upper lobe" (1). An advantage of robotic assisted thoracic surgery (RATS) is that the robotic arms are flexible and allow the surgeon to move instruments freely inside the chest cavity as needed without geometric limitations. Compared with single-incision video-assisted thoracic surgery (VATS), the flexibility is one of the primary advantages of robotic surgery. Although the literature revealed that RATS does not seem to offer any advantages over VATS with regards to complications, postoperative pain, hospital stay, and oncological outcome for early-stage lung cancer (2,3), the benefit of RATS is that the surgeon feels more comfortable and confident when performing RATS.

Prospective multicenter randomized trials are needed to determine the most appropriate instances to utilize RATS. To improve the quality of the robotic surgical training for thoracic surgeons, more advanced thoracic surgical procedure modules must be available in the near future. As the cost goes down, RATS is expected to be used widely in the future.

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References

- Kocher GJ. Robotic-assisted thoracoscopic surgery: state of the art and future perspectives. J Thorac Dis 2017;9:1855-7.
- Cao C, Manganas C, Ang SC, et al. A systematic review and meta-analysis on pulmonary resections by robotic videoassisted thoracic surgery. Ann Cardiothorac Surg 2012;1:3-10.
- Agzarian J, Fahim C, Shargall Y, et al. The Use of Robotic-Assisted Thoracic Surgery for Lung Resection: A Comprehensive Systematic Review. Semin Thorac Cardiovasc Surg 2016;28:182-92.