Commentary: Less is more in modified subxiphoid approach for thymic malignancy

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In the field of surgery, the use of minimally invasive surgery is growing worldwide, and thoracic surgery is no exception. Currently, medical workers are well aware of video-assisted thoracoscopic surgery (VATS), and Yang and colleagues have developed a unique subxiphoid approach in the field of VATS thymectomy using an auxiliary sternal retractor to obtain a larger operative field and make thymectomy easier to perform. In this study, they demonstrated the usefulness of this procedure; that is, modified subxiphoid VATS thymectomy (mSVT), for locally advanced thymic malignancies. Previously, the authors had reported the usefulness of mSVT for thymic tumors from various angles. In a retrospective study with propensity score-matching analysis, the authors compared the safety and feasibility between mSVT and lateral intercostal-approach VATS thymectomy for Masaoka-Koga stages 1 and 2 thymomas, revealing the feasibility of mSVT for such thymomas. Furthermore, they conducted a randomized controlled trial that confirmed the perioperative benefit of mSVT in early thymic diseases, improving pain and eliciting a similar length of hospital stay. In addition, they introduced mSVT and explored the feasibility and safety of this method for patients with locally invasive thymomas. The authors also conducted a 7-year retrospective study to assess mSVT for myasthenia gravis, revealing the superiority of mSVT over the bilateral VATS approach in many aspects.

In the present study, the authors compared the mSVT approach with conventional median sternotomy in locally advanced T2 or 3 thymic malignancies, demonstrating that the same outcome can be achieved in a less invasive manner. In particular, the data clearly showed the superiority of mSVT over conventional median sternotomy in various aspects, such as operative duration, blood loss, drainage duration, length of hospital stay, and postoperative complications. Moreover, the 2 approaches did not differ in recurrence-free survival and overall survival.

More recently, robot-assisted thoracoscopic surgery (RATS) has been gaining popularity worldwide and is considered a suitable modality for mediastinal tumors. Thus, it would be interesting to compare mSVT with RATS in the future, with a particular focus on the cost of medical care, given that RATS warrants relatively more expensive equipment than VATS.

In this study, the authors included patients undergoing partial resection of great vessels while excluding those undergoing reconstruction of great vessels. Although performing vascular reconstruction under VATS presents a considerable challenge in terms of surgical safety, this complex procedure could be performed under a minimally invasive approach by integrating certain excellent modifications, such as mSVT, in the future.

Finally, I would like to commend the authors for their aggressive development and introduction of minimally invasive approaches and safe and reliable surgical techniques, which elicited excellent outcomes in the early and late phases of this study. The applicability and beneficiaries of mSVT warrant further assessment, and therefore, it is highly expected that these findings can be confirmed by other institutions worldwide.
Conflict of Interest Statement
The author reported no conflicts of interest.

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References