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CASE VIDEO

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A successful case of robot-assisted thoracic surgery for apical thoracic schwannoma

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Key message

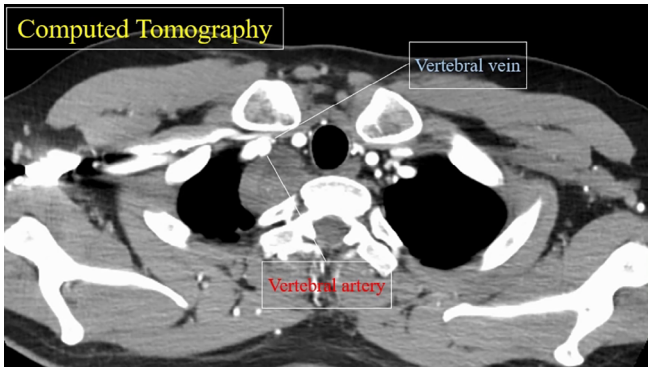
The thoracic apex is a narrow and complicated area with nerves and vessels, making it difficult to secure a visual field and perform surgical operations. Robot-assisted surgery enabled good visibility and highly flexible forceps manipulation, we were able to perform minimally invasive and safe thoracic apical tumour resection.

KEYWORDS

mediastinal tumour, neurogenic tumour, robot-assisted thoracic surgery, schwannoma, thoracic apex

CASE VIDEO

A male in his thirties presented with an asymptomatic sympathetic nerve-derived schwannoma, 3.7 cm in diameter in the right thoracic apex, abutting the right vertebral artery and vertebral vein (Video 1). He underwent robot-assisted surgery. The mediastinal pleura of the tumour was incised, the sympathetic nerve cut, and the tumour dissected (Video 2). Dissection of the tumour from the vessels was enabled by use of a 30° camera and precise manipulation by bending the joints in the optimal direction.[1] Postoperatively, although right mild ptosis and hypohidrosis appeared due to sympathectomy, he progressed well and was discharged on the 4th postoperative day.



VIDEO 1 Computed tomography image and magnetic resonance imaging.
Video content can be viewed at https://onlinelibrary.wiley.com/doi/10.1002/rcr2.1218

VIDEO 2 Surgical technique video of robot-assisted thoracic surgery for apical thoracic schwannoma.
Video content can be viewed at https://onlinelibrary.wiley.com/doi/10.1002/rcr2.1218

AUTHOR CONTRIBUTIONS

Hironori Oyamatsu contributed to the writing of this manuscript. All authors treated the patient and approved the final manuscript.

CONFLICT OF INTEREST STATEMENT

None declared.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

The authors declare that appropriate written informed consent was obtained for publication of this manuscript and accompanying images.

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REFERENCE

1. Qi F, Xiang M, Deng Y, Huang W, Sun Y. Application of Da Vinci robot and Thoracoscopy in radical lung cancer surgery. J Healthc Eng. 2022;2022:2011062–8.

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