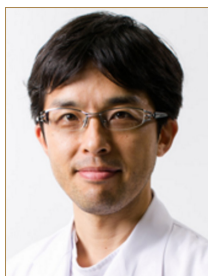




Editorial



Commentary on “Remnant Tumor Margin as Predictive Factor for Its Growth After Incomplete Resection of Cervical Dumbbell-Shaped Schwannomas”

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See the article “Remnant Tumor Margin as Predictive Factor for Its Growth After Incomplete Resection of Cervical Dumbbell-Shaped Schwannomas” via <https://doi.org/10.14245/ns.2142698.349>.



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In this paper,¹ the authors reported their surgical results of the cervical dumbbell schwannomas. Among the 21 patients who underwent incomplete resections for the cervical dumbbell schwannomas, 10 patients experienced regrowth of the remnant tumors in minimum 2-year follow-ups. The authors found that the regrowth was more likely to occur when the proximal margins of the remnant tumors were touching the posterolateral corner of the intervertebral disc or the vertebral body at the entrance of the intervertebral foramen. In other words, important steps to prevent recurrences in the simple posterior approach for the cervical dumbbell schwannomas, are to achieve maximum degrees of the tumor resections and leave the remnant tumor margins distally away from the entrance of the foramen. The information regarding the risk factors of remnant tumor regrowth is practical and useful.

Regarding the surgical resections of the cervical dumbbell schwannoma, there are 2 other important issues. The one is whether we should sacrifice the involved nerves to pursue higher degrees of the resections. As Kim et al.² indicated, resections of the nerve roots induced new neurological deficits in 23% of the cases. This is encouraging since we could possibly achieve complete resection of the tumors with preserving the neurological functions in 76% of the cases even after the nerve resections. However, it is still difficult to predict which patient would suffer postoperative neurological deficits. Therefore, I believe that the surgical strategy should be more individualized. For instance, the surgical strategy can be different between the right C7 schwannoma and the left C3 lesion in the right-handed person.

The other issue is location of the tumors in relation to the surrounding structures. Xin et al.,³ demonstrated a novel classification of the schwannoma based on the membranous structures including the dura matter, the arachnoid, and the pia matter. The margins between the tumors and the surrounding structures would define the surgical dissection planes. Pre-operative evaluations and intraoperative findings could help surgeons to pursue the surgical planes and achieve higher degrees of the surgical resections in safely fashion.

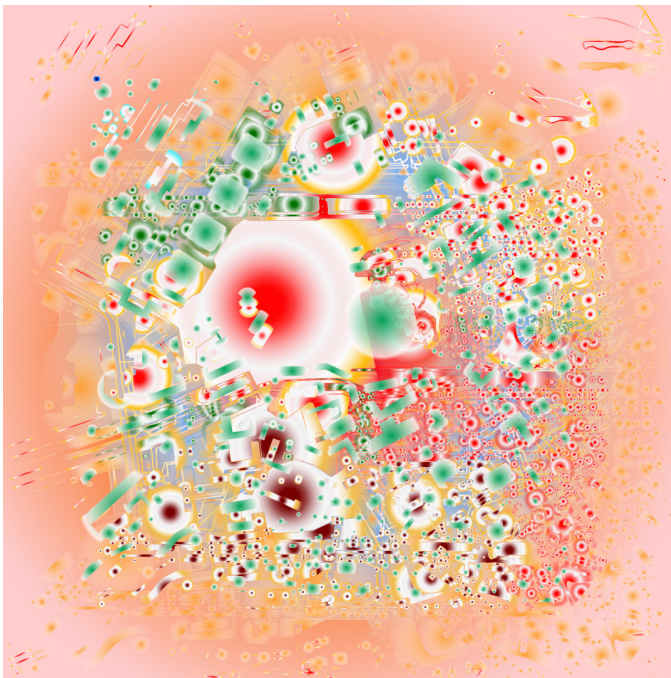
For any type of neurological surgery, the ultimate goal is to achieve complete resection of the tumors and simultaneously preserve the neurological function. Although it is not an easy task in the cervical dumbbell schwannomas, the surgeons should still make decisions

during the surgery to find balance between the completeness of the resections and preserving the neurological functions.

Conflict of Interest: The author has nothing to disclose.

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