

Peer Review File

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Reviewer A

Case presentation

Comment 1: Descriptions from line 25 in page 4 to line 15 in page 5 should be deleted. These are described also in the Discussion section.

Reply 1: We have deleted Descriptions from line 25 in page 4 to line 15 in page 5

Comment 2: Line 29 page 4. What is “enhancement of resistance”?

Reply 2 : Enhancing resistance refers to strengthening one's own immunity through certain means. It is the body's own defense mechanism. It is the ability of the body to recognize and eliminate any foreign bodies (viruses, bacteria, etc.), deal with aging, injury, death, and degeneration of its own cells, and recognize and deal with mutant cells and virus infected cells in the body.

Comment 3: Could the authors report findings during surgical removal of tumor in detail? In particular, I feel the relationship between the tumor and the dura mater is important, because the authors reported the dural tail sign and mentioned the possible origin of tumor in the presented case.

Reply 3 : We have revised the text as required (see page 4, lines 20-22)

Changes in the text : During the operation, it can be seen that the tumor erodes the skull and dura, and the tumor is closely adhered to the dura.

Comment 4: Fig. 2F. Where was the region of interest placed on? Although the authors report only the lowest value of ADC, how much was mean ADC?

Reply 4 : We have revised the text as required (see page 4, lines 24-25)

Changes in the text : The region of interest is the solid component of the tumor, and it has been marked on Fig. 2F. The average value was approximately $0.572 \times 10^{-3} \text{mm}^2/\text{s}$.

Comment 5: All of Figure 3 are little obscure due to weak magnification. All figures should be demonstrated more finely under strong magnification.

Reply 5 : We have replaced all the figures as required (see page 11, lines 7-9)

Discussion

Comment 1: There is no discussion about ADC. This is the most regrettable shortcoming in this article. Because CT and conventional MRI are insufficient for preoperative diagnosis of EMCS as the authors mentioned in the text, further supplementary neuroimaging is desired. As I pointed out above, the authors had better report the mean value rather than lowest value, and discuss the utility of ADC, while summarizing and shortening discussions for CT and conventional MRI.

Reply 1 : We have revised the text as required (see page 7, lines 2-8)

Changes in the text : The average value was approximately $0.572 \times 10^{-3} \text{mm}^2/\text{s}$, indicating limited diffusion. The degree of differentiation of tumor can reflect the benign and malignant of tumor. The lower the degree of differentiation, the higher the degree of malignancy, the more obvious the cell abnormality, the increase of nucleocytoplasmic ratio and the close arrangement of cells, resulting in the limited diffusion of water molecules inside and outside the cells in the tissue, and the corresponding decrease of ADC value.

Comment 2: Reference 12. This is a paper regarding to classical chondrosarcoma, but not mesenchymal chondrosarcoma.

Reply 1 : Because intracranial chondrosarcoma is also a rare malignant chondrogenic tumor, they have similar pathological features and imaging findings.

Reviewer B

Comment 1 : Chondrosarcoma in general are known for the typical 'ring-and-arc' calcifications which represent the chondroid matrix. This case did not show this typical calcification type. Did you find literature about this type of calcification in EMCS?

Reply 1 : We found descriptions of calcification in some of the literature on EMCS.

For example:

(1) Sadashiva N, Sharma A, Shukla D, et al. Intracranial Extraskeletal Mesenchymal Chondrosarcoma. *World Neurosurg.* 2016;95:618.e1-618.e6.

(2) Xiao A, Li Z, He X, et al. A rare tentorial mesenchymal chondrosarcoma in posterior cranial fossa: case report. *Neurol Neurochir Pol.* 2014;48(4):287-291.

Comment 2 : Abstract: The abstract is quite long, with an extensive summary of the imaging characteristics. The abstract should focus more on key imaging characteristics to differentiate it from other lesions.

Reply 2 : We have revised the text as required (see page 2, lines 13-15)

Changes in the text : The important imaging signs of this case are irregular calcifications of soft tissue on mass on CT and “dural tail” sign on MRI.

Introduction:

Comment 3 : page 3 line 10. The difficulty of CT ... is extremely difficult. Needs references.

Reply 3 : We have added the reference as required (see page 9, lines 9)

Changes in the text : Xiao A, Li Z, He X, et al. A rare tentorial mesenchymal chondrosarcoma in posterior cranial fossa: case report. *Neurol Neurochir Pol.*

2014;48(4):287-291.

Case presentation:

Comment 4 : p3 line 26: What do you mean by 'focus volume'?

Reply 4 : It represents the tumor volume

Comment 5 : p4 line 30 to p5 line 4. Intracranial EMCS ... bone of the lesion. This is a sudden transition from the description of the imaging characteristics to I assume is data from literature? This part may be more suitable for the discussion, and needs references.

Reply 5: This part has been deleted, because they are described also in the Discussion section.

Discussion:

Comment 6 : p6 line 12: literatures -> literature.

Reply 3 : We have revised the text as required (see page 5, lines 24)

Changes in the text : literature