

Peer Review File

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Reviewer Comments

Comment 1:

Abstract

Line 20: SFT was classified as grade I for its more collagenous fibers and low cellularity. HPCs were classified as grades II and III due to high cellularity.

Comment: The description listed above is incorrect.

SFT/HPC is a mesenchymal tumor of fibroblastic type, often showing a rich branching vascular pattern, encompassing a histological spectrum of tumors previously classified separately as meningeal SFT and HPC. In the CNS, a hypocellular, collagenized tumor with a classic SFT phenotype is considered grade I, whereas more densely cellular tumors mostly corresponding to the HPC phenotype are classified as grade II or III (anaplastic) depending in mitotic count (<5 vs >5 mitoses per 10 high-power fields).

Please read the guidelines for grading of CNS SFT/HPC (WHO Classification of Tumours of the Central Nervous System, Revised 4th Edition, Editors: Louis DN, Ohgaki H, Wiestler OD, et al., IARC, Lyon, 2016, pp. 249-251) and PMID: 34171600.

Reply 1:

Thank you very much for your excellent suggestion. We have checked the guidelines and the references you gave me and have changed the text as you suggested. (see Page 2, line 24- 27) I have added the reference. (see Page 11, line 193- 197)

Comment 2:

Who made the diagnosis of the tumors: the neurosurgeon or a pathologist? You are showing histology of the tumors.

Reply 2:

The diagnoses of the tumor were made by the pathologist of our university in both cases. We received advice from the pathologist who made the diagnosis and made additions and corrections to the pathological findings. I have added a note to that effect in the introduction. (see Page 4, line 60- 61)

Comment 3:

Introduction

Line 43: The malignancy ranges from grades I to III. WHO grade I corresponds to classical SFT with low cell density and low nuclear fission. WHO grades II and III correspond to HPC types with high cell density (1).

Comment: Again, it looks like the authors are not familiar with terminology and diagnostic criteria (see comment above regarding diagnostic criteria). Grade I tumors are considered benign and typically treated by surgical resection alone. Grade II and III tumors are considered malignant and treated with adjuvant therapy.

Reply 3:

Thank you very much for your invaluable comments on the terminology and diagnostic criteria. We have revised the text as you suggested. (see Page 3, line 48- 52)

Comment 4:

Case presentation

Line 82: Hematoxylin-eosin-stained sections revealed dense cell proliferation consisting of spindle-shaped or circular cells. The mitotic figures were scant. Immunohistochemical studies showed that the tumor cells were positive for STAT6, CD 34. The Ki-67 labeling index was 1–3%. This revealed that the pathologic type was SFT/HPC, WHO grade I

Comment: The histologic description is insufficient and Figure 3A is of poor quality.

Please replace the figure with a new one showing features of SFT (patternless architecture of a tumor composed of cells with bland ovoid-to-spindle-shaped nuclei and scant eosinophilic cytoplasm, and stromal collagen deposition).

Reply 4:

We apologize for the insufficient of histological findings in the pathological findings. We have changed and added the description of the characteristics of SFTs as you instructed. (see Page 5, line 84- 86)

Based on the advice of the pathologists who performed the pathological diagnosis of this case, the image in Figure 3A and the rest of Figure 3 have been replaced. Based on these changes, the figure legends have also been revised. (see Page 15, line 250- 254)

Comment 5:

Case presentation

Line 109: Hematoxylin-eosin-stained sections revealed spindle-shaped cell proliferation with a

collagen-matrix background. There was no necrosis, but scattered mitotic figures were observed. Immunohistochemical staining was positive for STAT6 and CD 34. The Ki112 67 labeling index was 5%. Thus, the pathological diagnosis was SFT/HPC WHO grade 113 II (Figure 6).

Comment: The histologic description is insufficient and Figure 6A is of poor quality.

Please replace the figure with a new one showing features of HPC (Diffuse high cellularity, thin-walled branching vessels, closely apposed cells with round to ovoid nuclei arranged in a haphazard pattern, with little intervening stroma). Show mitoses to confirm the diagnosis.

Reply 5:

We apologize for the inadequate description of the histological findings in case 2 and the poor quality of the figure. On the advice of the pathologists who diagnosed this case, we have added the histological findings of diffuse high cellity and with little intervening stroma confirmed in this case and replaced Fig. 6A with the corresponding image. (see Page 6, line 108- 109)

In addition, based on the pathologist's opinion, all other images have been revised to make them easier for the reader to understand. The figure legends have also been revised to reflect these changes. (see Page 16, line 271- 274)