Dear Editor-in-Chief,

Thank you for your interest in my article. I am very pleased to get the reviewers' comments about my manuscript, "Two cases of malignant melanotic nerve sheath tumors in the spinal canal: Psammomatous and non-psammomatous type". I'm honored to have a chance to revise my manuscript for the journal, World Journal of Clinical Cases. I paid attention to all criticisms by the reviewers and amended my manuscript accordingly.

Response to editor-in-chief

I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

Thank you for your comment.

As requested, we provided the original figure documents. We also prepared the figures using PowerPoint. We confirmed that all figures are original and were not published elsewhere. We added copyright information to each figure as requested.

Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the RCA. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: https://www.referencecitationanalysis.com/.

In addition, as requested, we added information on highlights of the latest cutting-edge research. In accordance with your suggestion, we found the following article in the RCA: “Extramedullary malignant melanotic schwannoma of the spine: Case report and an up to date systematic review of the literature.”

This article provided cutting-edge information related to our article. We added the following information to the Discussion section of our manuscript:

“Solomou et al. reviewed 65 reported cases of extramedullary spinal melanotic schwannoma [10] and these tumors most commonly occurred between 30 and 40 years of age. But in our two cases, it was diagnosed at a much older age.
MMNST patients usually have symptoms due to compression of adjacent structures during the fourth decade. A previous literature review reveals that more than 50% of the cases have local recurrence or distant metastasis or both [10].”

Solomou G, Dulanka Silva AH, Wong A, Pohl U, Tzerakis N. Extramedullary malignant melanotic schwannoma of the spine: Case report and an up to date systematic review of the literature. *Ann Med Surg (Lond)* 2020;59:217-23.

Response to science editor

The two cases reported here are not rare but have a presentation in rare locations i.e, rare intradural locations and can be put in differentials with various other common tumors that can have an intradural location. Also, the cases have an unusual presentation at an older age than the cases previously reported in the literature. The authors are requested to improve the overall status of the manuscript. Remove the repetition from the discussion section. Also, Cite and compare the previous literature in the discussion section. Improve the grammar of the manuscript. overall the manuscript needs some major revision.

Thank you for your comment. We agree with your opinion. We tried to improve the manuscript by answering all reviewer comments and making changes accordingly.

As requested, we removed repetitive sections from the Discussion section.

The following sentence was removed from the Discussion section for being repetitious:
“According to the revised 2020 WHO classification, the term “melanotic schwannoma” has been changed to “malignant melanotic nerve sheath tumor (MMNST),” which was reclassified as a malignant tumor due to its aggressive clinical behavior [4].”

In addition, we added further comparison to the previous literature in the Discussion section as follows.

“Solomou et al reviewed 65 reported cases of extramedullary spinal melanotic schwannoma [10] and these tumors most commonly occurred between 30 and 40 years of age. But in our two cases, it was diagnosed at a much older age.
MMNST patients usually have symptoms due to compression of adjacent structures during the fourth decade. A previous literature review reveals that more than 50% of the cases have local recurrence or distant metastasis or both [10].”

Solomou G, Dulanka Silva AH, Wong A, Pohl U, Tzerakis N. Extramedullary malignant melanotic schwannoma of the spine: Case report and an up to date systematic review of the literature. *Ann Med Surg (Lond)* 2020;59:217-23.

We also hired a professional medical editor to fix all grammatical issues. The editor provided an editorial certificate as well.

Responses to the comments of Reviewer #1

1. Spinal MMNSTs are rare entities.Theirs pathological diagnosis should be combined with history, histopathological characteristics, immunohistochemistry and ultrastructure analysis: it is very important to distinguish it from malignant melanoma, melanotic peripheral nerve sheath tumor and synovial sarcoma. Pathological morphology of ultrastructure is the most important evidence for the diagnosis.More immunohistochemical indicators should be provided, such as GFAP ， CD34 ,Ki-67 ,HMB45 ,MBP ,Vim Melan-A and CK.etc.2.It is suggested to add some differential diagnosis, such as Biphasic synovial sarcoma ,Melanoma neurilemmoma etc.

Thank you for your comment. We agree with your opinion. We added the following information about immunohistochemical indicators based on our further diagnostic workup in accordance with your suggestion:

“In case 1, on immunohistochemistry, positive immunoactivity was shown for S-100 protein (Fig. 1f) and vimentin. HMB45, Melan-A, and GFAP were negative. The Ki67 proliferation index was 7.7%.”

“In case 2, immunohistochemical staining revealed positive immunoactivity for the S-100 protein (Fig. 2h). In addition, it was positive for HMB-45 (antimelanoma antibody). The tumor cells were negative for CK, EMA, C34, and SMA.”

In addition, we added the following information about differential diagnosis.

“The differential diagnosis of MMNST of apparent nerve sheath origin includes leptomeningeal melanocytoma, ancient schwannoma, pigmented neurofibroma, biphasic synovial sarcoma, neurilemmoma, and melanoma [13].”

Responses to the comments of Reviewer #2

1. Since the case report is written for rare cases or cases with special significance, the symptoms, signs, examination results, and treatment methods with special significance should be described in detail to highlight the key points.

Thank you for your comment. We agree with your opinion. We added details on patients' symptoms, signs, examination results, and treatment methods in the case report section.

2. The Discussion section is somewhat repetitive from the previous part of the manuscript. The Discussion section should discuss the existing theoretical and research findings, which should converge to the main reasons that raised doubts in the case and the most significant challenges.

Thank you for your comment. We agree with your opinion.

As requested, we removed repetitive sections from the Discussion section.

The following sentence was removed from the Discussion section for being repetitious:
"According to the revised 2020 WHO classification, the term "melanotic schwannoma" has been changed to "malignant melanotic nerve sheath tumor (MMNST)," which was reclassified as a malignant tumor due to its aggressive clinical behavior [4]."

In addition, we added information to the Discussion on existing theoretical and research findings related to doubts and challenges regarding such cases. Specifically, we found an article on using ultrasound to help identify tumors. We think this interesting choice of imaging modalities may help regarding the challenges faced in these cases. The following sentence was added in accordance with your suggestion:

"Although previous reports revealed the various locations of the spinal MMNST [10], we didn't consider an MMNST with a psammatous body in the differential diagnosis. Punctate calcification foci are frequently found in spinal meningiomas due to the psammoma bodies [16]. Also, conventional schwannomas usually demonstrate higher signal intensity on T2WI, cystic changes, and inhomogeneous enhancement. In our case, the tumor showed T1 hyperintensity and T2 hypointensity, we didn't consider the possibility of these rare variants of nerve sheath tumor. Although the MR findings in myxopapillary ependymomas were nonspecific, the diagnosis can be suggested by a large, intensely enhancing, intradural extramedullary thoracolumbar mass that extends for several vertebral levels [17]. Intradural extramedullary lesions in the region of the conus medullaris include myxopapillary ependymoma, paraganglioma, nerve sheath tumor, meningioma, and metastasis [17]. Due to the older age and uncommon location (conus medullaris) compared to previous reports [10], the correct diagnosis was difficult in case 1."

3. Finally, the case is linked to the literature to illustrate the message conveyed by the case. The authors need to clarify whether the case is the same as the current knowledge on the issue and what the value and contribution of the evidence from this case is to future clinical practice.

Thank you for your comment. We agree with your opinion. We added the following information to the Discussion section:

"Considering previous reports, case 2 shows relatively characteristic findings of an MMNST, but older age and the rarity of this disease entity made the correct diagnosis difficult. However, unlike in case 1, the patient in case 2 undertook diffusion-weighted images. Most hypercellular malignant tumors show diffusion restriction, but our case did not show any diffusion restriction. Considering the malignant behavior of this rare disease, future studies could focus on functional images that could predict recurrence or metastasis of this disease."

4. Some keywords are not appropriate.

Thank you for your comment. We agree with your opinion. We revised the keywords as follows in accordance with your comment:

Nerve sheath neoplasm; Extramedullary; Malignant; Melanotic; Magnetic resonance imaging

5. The English needs to be improved to a certain extent. There are some errors in grammar and format in the whole manuscript: inconsistencies; spelling mistakes; single and plural expressions; the use of prepositions and definite/indefinite articles.

Thank you for your comment. We agree with your opinion. We hired a professional medical editor to fix any grammatical issues (including inconsistencies; spelling mistakes; single and plural expressions; the use of prepositions and definite/indefinite articles), as per your suggestion. The editor provided an editorial certificate as well.

6. The typography of Figure 2 is confusing.

Thank you for your comment. We agree with your opinion. We changed the typography in Figure 2 to make it more clear.