

23th June 2022

Dear Editor,

Re: manuscript reference no.77403

Thank you for sending the referees' comments on our manuscript entitled: 'Myeloid sarcoma with ulnar nerve entrapment: A case report'.

The authors would like to thank the reviewers for providing feedback on this manuscript, which was both positive and constructive. We have integrated these comments and suggestions into our revised manuscript. We have also separately summarized the reviewers' feedback and listed our responses as enclosed here for your reference.

A major addition is Table 1, reviewing similar cases of myeloid sarcoma-associated nerve entrapment. This was prepared with the help of a new author, which we have added to the author list. We have also adjusted the order of authors as further contributions have been made by the authors as a result of revisions later in the article.

I hope you find the revised manuscript satisfactory and acceptable. Should you have any further questions or comments, please do not hesitate to contact us.

Yours sincerely,

Yu Zhou (on behalf of all authors)

Response to reviewer ID:06109990 comments:

1) Minor editing and language corrections are necessary.

Response: Modifications have been made as required.

2) Title a. You missed mentioning the entrapped nerve. b. There is no running title. c. The letter "a" should be with a capital letter.

Response: Thank you for the comments. a. We have changed the title to: Myeloid sarcoma with ulnar nerve entrapment: A case report. b. and c. have been modified as required.

3) Abstract a. Page 1 line 26: Add the abbreviation of " Myeloid sarcoma". b. Page 2 line 1 "multiple sclerosis" Please use another term to not understand the readers that this term is a

disease, not a pathological change. c. Page 2 line 1: "MRI" It is not advisable to use the abbreviation in the abstract.

Response: Modifications have been made as required.

4) Keywords a. You must use at least 6 keywords as per journal style. b. You should use a semicolon between the keywords instead of a comma.

Response: Thank you for the comments. Modifications have been made as required.
Keywords: Myeloid sarcoma; Ulnar nerve entrapment syndrome; Acute non-lymphocytic leukemia; Sarcoma; Surgery; Case report.

5) Introduction: Please add a reference for this sentence "It is rare in the literature for MS to affect the brachial plexus and produce ulnar nerve compression symptoms."

Response: Thank you for the comments. Modifications have been made as required.

- Heckl S, Horger M, Faul C, Ebrahimi A, Ioanoviciu SD. Myeloid sarcoma of nervous plexus - Befall des Nervenplexus durch extramedulläre Manifestation der akuten myeloischen Leukämie [Myeloid sarcoma of nervous plexus - infiltration of the nerve plexus by extramedullary manifestation of acute myeloid leukemia]. *Rofo*. 2014;186(12):1059-1062. doi:10.1055/s-0034-1369372
- Das JP, Riedl CC, Ulaner GA. 18F-FDG PET/CT Helps Differentiate Peripheral Nerve Myeloid Sarcoma From a Presumed Benign Nerve Sheath Tumor. *Clin Nucl Med*. 2020;45(12):989-991. doi:10.1097/RLU.0000000000003299

6) Case presentation a. Page 3 line 15: please you should not start the sentence with a number. b. Page 3 lines 27-30: 1. Write the full names of the abbreviations. 2. Write the reference range of each. c. Page 3 lines 32-34: 1. Please add these X-rays as a figure. 2. Why you did do elbow X-rays only. d. "Postoperative pathological findings were as follows: lymphohaematopoietic tumour (both neuroepithelial and lymph nodes), combined with immunohistochemical staining results consistent with MS [CD3 (-), CD20 (-), CD21: FDC network (+), CD5 (-), Ki-67 (+70%), TdT (-), LCA (+), MPO (+), CD117 (+), CD34 (+)] (Figure 3-4)." I think this belongs to the treatment rather than to the outcome and follow-up. e. Page 4 line 26: postoperative visual analogue scale (VAS) of what? Please specify.

Response: Thank you for the comments. a., b., c. and d. modifications have been made as required. We only performed screening elbow X-rays as we first suspected cubital tunnel syndrome based on the patient's description of symptoms and physical examination. e. The Visual Analogue Scale (VAS) was used to assess pain from 0 (no pain) to 10 (most severe, unbearable pain), widely used in clinical practice in China.

7) Discussion a. There is no comparison with other study/s. If no similar study, you can compare similar reported cases in other areas. b. Other reasons cause features similar to the manifestations of the presenting case. Therefore, it is necessary to discuss this issue. a. You started the discussion in the first paragraph with the prevalence and then immediately you discuss the treatment options for the MS. I think in discussing any case, the following should be followed: Prevalence of the disease, causes, clinical features, investigations, differential diagnosis, treatment, and prognosis. Therefore, this sequence is not appropriate here. b. Please avoids unnecessary repetition of what you said in the case presentation section.

Response: Thank you for the comments. We have noted other similar studies in the newly added Table 1, and we have re-written the discussion section to follow your suggested sequence of topics.

8) Conclusion: Is nearly a repetition of the presenting case. Therefore, I suggest performing a truncation to be useful as a message takeaway for the clinicians in the field.

Response: Thank you for the comment. The conclusion has been modified accordingly.

9) References: a. The writing of the references is not following the journal style. b. References 5 and 14 are similar. c. Please, you can use the below link to update your references <https://pubmed.ncbi.nlm.nih.gov/?term=Myeloid+Sarcoma&filter=years.2020-2022>

Response: Thank you for the comments. Modifications have been made as required.

10) Figures: a. I think you can delete figure number 5. Besides, it is illogical to start the numbering with a figure number 5. b. Figures 1 and 2: 1. Please remove any data from the films. 2. It needs to use a red arrow in the sagittal section in Figure A1. 3. You should mention the arrows in the figure legend. c. Figures 3 and 4: 1. You should mention the full name of the abbreviation "MS". 2. You should add the magnification power of the slides.

Response: Thank you for the comments. Modifications have been made as required. Figure 5 (now Figure 6) has been placed at the end of the manuscript, as this figure is required for the submission request. Regarding the magnification power for the histology images, scale bars are already provided on the images for reference of the magnification. The slides themselves now reside with the external hospital where the patient is undergoing treatment of the primary disease, so review of exact microscopy magnification power would be difficult.

Response to reviewer ID:05226306 comments:

1) The pt had Psoriasis. Any relevant medications (Methotrexate) which might have played a role?

Response: Thank you for the comment. The patient had a previous history of psoriasis for 20 years, during which time he was treated well with herbal formulas with no relapse, and the patient recalls not taking methotrexate. We do not feel that the two diseases are related.

2) Was a nerve muscle charting / power assessment done?

Response: Thank you for the comment. We regret to inform you that due to the difficult family situation of the patient, we only performed a physical examination and did not do an EMG or further neuromuscular studies for assessment. However, the patient had previously undergone an EMG elsewhere (see newly added section 'neurophysiological examination').

3) Was a nerve conduction study performed?

Response: Thank you for the comment, please see the previous response.

4) What is the role of sonography in retrospect?

Response: Thank you for the comment. We initially ruled out elbow joint entrapment by X-ray and then further ruled out any swelling or fascial entrapment of the nerve around the upper arm by ultrasound. We have now added the ultrasound report to the manuscript.

5) Final diagnosis "Left ulnar nerve entrapment" does not reflect the other components cubital tunnel syndrome / primary ANLL.

Response: Thank you, this is a very good point and we have modified it to 'Myeloid sarcoma causing ulnar nerve entrapment'.

6) Fig 5 mentioned is not available. "postoperative visual analogue scale (VAS) score had decreased to 1, from 5 preoperatively (Figure 5)".

Response: Apologies for the confusion: no figure was meant to show the VAS. Originally, Figure 5 was a flowchart that was requested for journal submission – this has now been revised

to Figure 6

7) Conclusion can clearly state the authors' management stand (Eg : In a background ANLL with nerve entrapment features, MS to be suspected and prompt decompression can help in reversal of symptoms)

Response: Thank you for the comments. Modifications to the conclusion have been made as required.

Response to reviewer ID: 05464606 comments:

1) Please add "Myeloid sarcomas (MS)" in the ABSTRACT before using the abbreviation of MS.

Response: Thank you for the comment. The modification has been made as required.

2) There are some grammar errors in the text. Please edit the text by a native English.

Response: Thank you for the comments. The text has been reviewed and edited by a native English speaker.

3) Please have a review of similar cases with nerve entrapment by myeloid sarcoma.

Response: Thank you for the comments. We have now added Table 1 to address this issue.

Response to reviewer ID: 05742869 comments:

1) It would be good to supplement data with similar cases and compare patient outcomes.

Response: Thank you for the comments. We have added similar cases to Table 1. We found that most reports in the literature do not mention patient outcomes, so we have not added a comparison.

Round 2:

Dear Editor, Re: manuscript reference no.77403 Thank you for sending the referees' comments

on our manuscript entitled: ‘Myeloid sarcoma with ulnar nerve entrapment: A case report’. The authors would like to thank the reviewers for providing feedback on this manuscript, which was both positive and constructive. We have integrated these comments and suggestions into our revised manuscript. We have also separately summarized the reviewers’ feedback and listed our responses as enclosed here for your reference. A major addition is Table 1, reviewing similar cases of myeloid sarcoma-associated nerve entrapment. This was prepared with the help of a new author, which we have added to the author list. We have also adjusted the order of authors as further contributions have been made by the authors as a result of revisions later in the article. I hope you find the revised manuscript satisfactory and acceptable. Should you have any further questions or comments, please do not hesitate to contact us. Yours sincerely, Yu Zhou (on behalf of all authors) -----

Response to reviewer Anonymous comments: 1) Minor English language and editing are necessary. Please take care of the highlighted word/s in a yellow color through the manuscript. Response: Modifications have been made as required. 2) Please correct the title as "Myeloid sarcoma with ulnar nerve entrapment: A case report". Response: Modifications have been made as required. 3) I suggest this running title "MS with ulnar nerve entrapment". Response: Modifications have been made as required. 4) I think it is better to remove the figure 1 as it reveals normal findings. Response: Thank you for your comment, this Figure 1 was added at the request of other reviewers. 5) I think figure 4 should be separated into 2 figures; one for the intraoperative finding and the other for the histopathological examination. Response: Thank you for your comment, but we feel that this would be rather cumbersome as the 2 figures are put together with separate descriptions. If they were separated, a single diagram would look monotonous. 6) Please replace the "Immunopathological examination" in the figure legend by "Immunohistochemical examination". Response: Modifications have been made as required. 7) I think it is a wrong word. Response: The patient is the person in this case report. 8) Still the first paragraph contains different huge information and can be divided into smaller paragraphs. Response: Modifications have been made as required. 9) They should be revised for example the reference number 1, I found it be cited in English language in Google scholar as "Shahin, Omar A., and Farhad Ravandi. "Myeloid sarcoma." *Current opinion in hematology* 27.2 (2020): 88-94." Response: Thank you for the comments. Modifications have been made as required.