Author's response to reviews

Title: Methotrexate myelopathy after intrathecal chemotherapy: a case report

Authors:

Kenya Murata (kemurata@wakayama-med.ac.jp)
Ayaka Maeba (ayapasso1012@yahoo.co.jp)
Mika Yamanegi (tt6778@yahoo.co.jp)
Ichiro Nakanishi (icr@wakayama-med.ac.jp)
Hidefumi Ito (ito@wakayama-med.ac.jp)

Version: 4
Date: 12 April 2015

Author's response to reviews:

April 8, 2015

Professor Michael Kidd
Flinders University, Australia
Editor-in-Chief, Journal of Medical Case Reports

Dear Prof. Kidd,

Re: Reference number 1597378419155384 (Methotrexate myelopathy after intrathecal chemotherapy: a case report by Murata et al.)

Thank you for the opportunity to resubmit our paper to Journal of Medical Case Reports, as a case report. The comments of the reviewers have been helpful in the revision of our manuscript. We have addressed the questions raised by the referees as follows:

We believe that we have responded in full to the comments of the reviewers and trust you will now find the paper suitable for publication in the Journal of Medical Case Reports, as a case report.

I have attached the revised manuscript with highlights and Figures.

Thank you for your consideration. If you require any further assistance, please do not hesitate to contact me.

Yours sincerely,
Kenya Murata, MD, PhD
Assistant Professor
Department of Neurology
Wakayama Medical University
E-mail: kemurata@wakayama-med.ac.jp

Concerning the reviewer’s comment

Reviewer #1:

1. The reason why MTX was administrated intrathecally is unclear. Since the patient had mass in vertebral bones, they did not need to administrate intrathecally.

We thank the reviewer for the careful comment. After 20 Gy radiation therapy, we performed cerebrospinal fluid cytology and observed malignant cells. From these results, we concluded that lymphoma cells had invaded into the central nervous system and administrated MTX intrathecally. We described this in the case presentation section of the revised manuscript (page 5 line 1-5).

2. The serum Vit B12 level was rather high. Although the authors mentioned the patient was treated with B12, but it was 1 month before. The authors need the explanation.

The patient complained of dysesthesia of bilateral feet at 5 months after the first chemotherapy. Since then, we had prescribed methylcobalamin, which the patient took for two months. We described this in the case presentation section of the revised manuscript (page 4 line 17- page 5 line 1).

3. Because clinical and MRI findings are similar to subacute combined degeneration (SCD), the author should discuss more to deny the patient having SCD.

The clinical features of SCD are pyramidal signs and impaired deep sensation. This patient showed the symptom of transverse myelitis, which is very rare in patients with SCD. We described this in the case presentation section of the
4. Cranial nervous system should be cranial nerves.

According to reviewer’s suggestion, we use “cranial nerves” instead of “cranial nervous system”. We described this in the case presentation section of the revised manuscript (page 5 line 9).

Reviewer #2:

1. The case could have been improved by a search for genetic variants of homocysteine metabolism.

We would like to thank the reviewer for the careful comment. As suggested by the reviewer, we needed genetic analysis for folate/methionine metabolism. We explained the importance for these genetic tests, but the patient refused testing. We described this in the case presentation section of the revised manuscript (page 6 line 3-4).

2. The reference Ackermann et al is missing. In that paper, a therapeutic strategy against MTX-induced CNS damage is described, which was successful in the reported case.

As suggested by the reviewer, we cited the Ackerman reference [7] in the end of the discussion section of the revised manuscript (page 8 line 9).

3. In the current work, therapy against myelopathy has not been tried, unfortunately.

As suggested by the reviewer, we intended to try multiple folate substitution. First, we performed leucovorin calcium and high-dose vitamin B12 replacement therapy. Next, we had were preparing multiple folate substitution, but the patient died. We have described this in the case presentation section of the revised manuscript (page 6 line 9-10) and in discussion section of the revised manuscript (page 8 line 7-9).