Author's response to reviews

Title: Carnitine deficiency presenting with decreased mental status in a patient with amyotrophic lateral sclerosis receiving long-term tube feeding: a case report

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Author's response to reviews: see over
Professor Michael Kidd  
Editor-in-Chief  
*Journal of Medical Case Reports*

21 May 2013

Dear Professor Kidd,

Re: Manuscript reference No. 4324026378520121

Please find attached a revised version of our manuscript entitled “Carnitine deficiency presenting with decreased mental status in a patient with amyotrophic lateral sclerosis receiving long-term tube feeding: a case report,” which we would like to resubmit for publication as a case report in the *Journal of Medical Case Reports*.

Your comments were highly insightful and enabled us to greatly improve the quality of our manuscript. In the following pages are our point-by-point responses to each of your comments.

Additions to the text are shown using yellow highlight. In accordance with your reviewer Ricardo Cruciani’s suggestion, the entire manuscript has been edited by a native English-speaking editor. A certificate of English editing has been attached as PDF file. We hope that the revisions in the manuscript and our accompanying responses will be sufficient to make our manuscript suitable for publication in the *Journal of Medical Case Reports*.

We look forward to hearing from you at your earliest convenience.

Yours sincerely,

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Responses to the reviewer’s comments

1. One reviewer want to have more cases which would be looked into the association between carnitine level and mental symptoms if you could. Otherwise, he has no idea about his mental improvement was caused by adding carnitine or not so far. Could you try to do this?

Response: This is the first case in which we tried carnitine supplementation for a patient with ALS undergoing long-term tube feeding. In ALS, the altered mental status and the disease progression itself may be indistinguishable from each other, especially in patients in a totally locked-in state (TLS). Dr. Mieko Ogino and Dr. Eiji Kitamura, well known neurologists specializing in ALS in Japan, stated that they might have misdiagnosed carnitine deficiency as TLS. Dr. Hayashi investigated impaired communication in 70 patients with ALS using tracheostomy positive-pressure ventilation (Hayashi H et al. ALS patients on TPPV: Totally locked-in state, neurologic findings and ethical implications. Neurol 2003;61:135-137). He reported that about 11% of patients developed TLS during the treatment course. However, this study did not evaluate carnitine deficiency among the patients. As we commented in the Discussion section, further research on carnitine supplementation in patients with ALS is necessary to clarify whether it prevents mental status deterioration. We hope that our case report can serve as the basis for a comparative controlled study of carnitine supplementation for patients with ALS.

We have added an acknowledgement to the manuscript expressing our thanks to Dr. Mieko Ogino and Dr. Eiji Kitamura for specialized advice on this manuscript.

2. Furthermore, please ask the author to by a native English-speaking person with experience in medical writing.

Response: The entire manuscript has been edited by a native English-speaking editor. Please refer to the certificate of English editing attached to the manuscript.