Author's response to reviews

Title: Intravenous Vitamin C Administration Reduces Fatigue in Office Workers: A Double-blind Randomized Controlled Trial

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Author's response to reviews: see over
Dear Editor-in-Chief and Reviewers,

We thank you for reviewing the manuscript. Please see our answers for reviewers’ comments.

To Reviewer 1 (Wangjae Lee)

We appreciate your keen pointing out.

1. The subjects are office workers, so they have a biennial health checkup covered by the National Health Insurance in Korea. The checkup includes complete blood count, ALT/AST, blood sugar and urinalysis. The research nurses asked participants about their latest checkup results and past medical history to exclude chronic diseases such as hepatitis, diabetes, renal diseases. Also the principal investigator, a board-certified family physician, performed physical examinations for the subjects one by one. We agree that it is ideal to obtain laboratory tests results before the trial, and actually there are some clinical trials performed blood chemistry panel for screening as bellows:


   However, there are other preceding studies did not checked blood tests and they used exclusion criteria such as asking about a clinically significant medical condition within the last 5 years as bellows:


   We thought our study subjects and design are similar to those. We mentioned this point in detail in Method and described it as one of the limitations in Discussion Section.

2. We did not assess DHA levels. When we planned the study, we referred to clinical studies on vitamin C and fatigue usually did not check the DHA. It seems apparent that our subjects received vitamin C injection showed significantly high vitamin C level than controls. The references are as follows:


3. We described HPLC measures in detail in Methods Section. Type of detector, column and buffers are as follows.
HPLC [High Performance Liquid Chromatography-UV detector] (Hewlett-Packard, German)
Column : Cogent (150mm X 4mmφ X 5um)
Buffers : Cetyltriethylammonium bromid (SIGMA, U.S.A) and Photassium dihydrogen phosphate (DUKSAN, Korea)

To Reviewer 2 (Sukchan Lee)

Thank you for the critical comments.

1. We used saline only as placebo instead of a positive drug against fatigue. Although corticosteroids or caffeine injection have potential to improve fatigue, those drugs have not been uniformly proved for healthy people till now. Thus we used saline as placebo controls.
2. As for the dose of vitamin 10g, the rationales for the dose selection are as follows. Preceding domestic study used the same dosage and it proved to be effective to enhance health related quality of life. For safety reasons, we thought the least mega-dose is desirable for large participants to avoid unexpected adverse reactions. We included the rationales to Discussion.

Thank you for consideration.
We are looking forward to hearing good news.

Sincerely yours,

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