Reviewer's report

**Title:** Bilateral brachial plexus injury following acute carbon monoxide poisoning

**Version:** 2  **Date:** 29 January 2013

**Reviewer:** Fadi Xu

**Reviewer's report:**

This manuscript reports a case showing a bilateral brachial plexus injury after acute CO exposure and its recovery. The novelty of this study has unclear in the current version, which limits the publication of this paper.

Comments:

1. CO-induced neuropathies, especially a bilateral brachial plexus injury as cited by the authors, have been reported before. If electrophysiological study is the unique feature of this study, please identify the pathophysiological significance of using this technique and clearly define the difference between this study and previous study [12].

2. The authors mentioned that CO induced a brachial plexus injury secondary to axillar hematoma in the previous studies [2,3]. Similarly, they also found a brachial weakness associated with edema of the upper limbs in current case. Did the edema of the upper limbs secondarily affect brachial plexus injury in this case?

3. In Introduction section - The authors stated that "..., but peripheral neuropathy and much more electrophysiological features have scarcely been reported [12]." This statement could mislead readers to believe that only on paper has been published in this field. In fact, these authors have also mentioned in the Discussion section that "..., only 8 reports of neuropathy after CO intoxication have been published last decades [4-11]." Please omitted "only" here and clarify that considerable reports have shown an adverse impact on peripheral neuropathy following carbon monoxide poisoning.

4. "In this study, of 2759 patients examined clinically between 1976 and 1982, neuropathy was diagnosed in 23 subjects. The incidence of neuropathy was 3.64% in admitted cases." Is it 3.64%? If so, where does this percentage come from (23/2759)?

5. Discussion - The description of previous results appear unfocused. Please shorten it with focusing on the new finding(s) of this study compared to previous results relate to CO-induced peripheral neuropathy. Inserting a table to summarize the previous related results may be helpful to readers.
6. Discussion - Although this is case report, the possible mechanisms underlying the selective injury in bilateral brachial plexus should be discussed. Was the improvement of bilateral brachial plexus injury following acute CO correlated to the improved edema of the upper limbs?

7. Please check the values in Table 1 (should be 3.1; 4.3 .... Instead of 3,1; 4,3 .... )

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests