Reviewer's report

Title: Comparison of cardiovascular co-morbidities and CPAP use in patients with positional and non-positional mild obstructive sleep apnea

Version: 3 Date: 26 June 2014

Reviewer: Stuart Quan

Reviewer's report:

Major Compulsory Revisions:

Abstract:

1. The sentence starting “However, the significant difference CPAP acceptance…” needs to be preceded by a statement indicating that there was an acceptance difference between positional and non-positional patients.
2. What is the difference between CPAP adherence and CPAP compliance? Most clinicians think of these as the same concept.
3. There is a typo “This study found d that…”
4. Again, in the conclusion, what is the difference between adherence and compliance?

Introduction:

1. Regarding the statement “As the severity of OSA tends to worsen over time, active and effective treatment for mild OSA is essential.”, this very debatable. There is no consensus that treatment of mild OSA is needed. I suggest the following language “As the severity of OSA tends to worsen over time, active and effective treatment for mild OSA may be required.”

Methods:

1. There is a typo in the sentence starting “The automated sphygmomanometer was…”. The word “manufacture” should be “manufactuer”.
2. I fail to understand why the authors are making the distinction between “compliance” and “adherence”.

Results:

1. Sentence starting “Within the non-positional group, group 3…”, has a very complex sentence structure and is difficult to understand.
2. In general, you do not have to reiterate all of the findings in Table 1 and 2 in the text. You should just highlight the important findings. It is very difficult to determine what the important findings of the study are.
3. Since CPAP adherence and compliance are highly correlated, why are you
using both of these variables? You should just use compliance.

Discussion:

1. In general, you are making definitive recommendations for therapy based on meager evidence. For example, to state that patients with poor sleep quality should receive “optimal” treatment is far overreaching. To base this recommendation on the evidence presented in reference #33 is not warranted.

2. To state that mild positional OSA has the same risk for CVD as non-positional mild OSA again is overreaching. Without a RCT, I think you should be less dogmatic.

**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.