Reviewer's report

Title: Heart rate variability in non-apneic snorers and controls before and after continuous positive airway pressure

Version: 1 Date: 8 May 2005

Reviewer: Stuart Quan

Reviewer's report:

General

This paper by Gates et al uses heart rate variability (HRV) as a means to assess autonomic nervous activity in non-apneic snorers and controls. The authors found that there were no differences between controls and snorers except when snorers were placed on nasal CPAP to abolish their snoring. When snoring was abolished by CPAP, there appeared to be an increase in sympathetic activity as evidenced by an increase in LF, decrease in HF and an increase in the LF/HF ratio. The authors postulate that acute snoring masks an underlying chronic increase in sympathetic activity that is only evident when snoring is suppressed with CPAP. The results are intriguing in that there is some evidence that snoring may be a risk factor for cardiovascular disease and thus an increase in sympathetic activity would be the underlying mechanism for the observation. However, if the authors' findings are true, would not individuals who chronically snore be protected from adverse effects of snoring, and only those who intermittently snore be at risk?

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The authors should respond to the question posed in the preceding paragraph under general comments.
2. The use of a 2% oxygen desaturation to define hypopnea is not common. Please justify.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

None

Discretionary Revisions (which the author can choose to ignore)

None

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests.