Reviewer’s report

Title: Snoring during pregnancy and its relation to sleepiness and pregnancy outcome - a prospective study

Version: 1 Date: 21 October 2013

Reviewer: NEAU P. Jean-Philippe

Reviewer’s report:

The authors, in a prospective study in Sweden, evaluated the development of snoring throughout pregnancy and its consequences.

They demonstrated that, through different self-administered close-ended questionnaires, snoring increases during pregnancy and is associated with sleepiness, higher BMI at the beginning of the pregnancy and edema, but not with adverse obstetric outcome.

These data are now well known since several recent publications have been devoted to this topic; most of them have demonstrated a close relationship between snoring and/or sleep-disordered breathing and obstetric outcome.

This is an interesting study. However, it is weakened by the fact that the main topic (i.e., snoring) and other parameters (i.e., edema) of this study are only obtained by a self-questionnaire.

Comments

Major points:

1) The evaluation of snoring is subjective and was classified into five categories: “always”, “often”, “sometimes”, “seldom” and “never”. What was the explanation given to the women before their choice for the category? What does ‘sometimes’ mean and the other categories? What was the difference between ‘sometimes’ and ‘seldom’?

1) In addition, the distinction between sometimes and often is of the utmost importance, since the first one belongs to a ‘non snorer’ and the second one to a ‘habitual snorer’ or a ‘gestational snorer’

2) Were their husbands interviewed in order to ascertain the snoring of their spouse and its frequency?

3) Were some patients recorded in order to validate the snoring? The reliability of snoring is very poor since it is well known that the self-reporting of sleeping habits may yield a significant underestimation of habitual snorers. For example, 13% of individuals, who stated that they had never snored, were unaware of their snoring (Telakivi et al, 1987)

4) It is possible to state that, a pregnant woman will pay more attention, concerning her snoring throughout her pregnancy, asking for her husband confirmation after the first questionnaire leading to an artificial increase in the
prevalence of gestational snorers.

5) It could be the same bias for the evaluation of edema. There was no more important weight gain among patients who snored and with edema during the pregnancy. Perhaps, pregnant women became more aware of edema since it was a part of the questionnaire at the first trimester of their pregnancy.

6) Who quoted the degree of edema: the patient or the midwife? The difference between mild and moderate is also very subtle.

7) The authors must discuss all these potential bias in a specific chapter.

Minor points:

1) How do the authors explain the relationship between snoring and peripheral edema since it was not related to weight gain.

2) Some references could be added since they were directly linked to this study.
   1. Frederik et al, Sleep Breath 2013
   2. Reid et al, Sleep 2011
   4. Izci et al, Sleep Med 2005

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.