

Supplementary Material S1. Survey 1: Berlin Questionnaire

Berlin Questionnaire (for sleep apnea)

Scoring Berlin questionnaire

Adapted from: Table 2 from Netzer, et al., 1999. (Netzer NC, Stoohs RA, Netzer CM, Clark K, Strohl KP.

Using the Berlin Questionnaire to identify patients at risk for the sleep apnea syndrome. Ann Intern Med. 1999 Oct 5;131(7):485-91).

The questionnaire consists of 3 categories related to the risk of having sleep apnea.

Patients can be classified into High Risk or Low Risk based on their responses to the individual items and their overall scores in the symptom categories.

Categories and scoring:

Category 1: items 1, 2, 3, 4, 5.

Item 1: if 'Yes', assign **1 point**

Item 2: if 'c' or 'd' is the response, assign **1 point**

Item 3: if 'a' or 'b' is the response, assign **1 point**

Item 4: if 'a' is the response, assign **1 point**

Item 5: if 'a' or 'b' is the response, assign **2 points**

Add points. Category 1 is positive if the total score is 2 or more points

Category 2: items 6, 7, 8 (item 9 should be noted separately).

Item 6: if 'a' or 'b' is the response, assign **1 point**

Item 7: if 'a' or 'b' is the response, assign **1 point**

Item 8: if 'a' is the response, assign **1 point**

Add points. Category 2 is positive if the total score is 2 or more points

Category 3 is positive if the answer to item 10 is 'Yes' OR if the BMI of the patient is greater than 30kg/m².

(BMI must be calculated. BMI is defined as weight (kg) divided by height (m) squared, i.e., kg/m²).

High Risk: if there are 2 or more Categories where the score is positive

Low Risk: if there is only 1 or no Categories where the score is positive

Additional question: item 9 should be noted separately.

BERLIN QUESTIONNAIRE

Height (m) _____ Weight (kg) _____ Age _____ Male / Female

Please choose the correct response to each question.

CATEGORY 1

1. Do you snore?

- ☐ a. Yes
- ☐ b. No
- ☐ c. Don't know

If you snore:

2. Your snoring is:

- ☐ a. Slightly louder than breathing
- ☐ b. As loud as talking
- ☐ c. Louder than talking
- ☐ d. Very loud – can be heard in adjacent rooms

3. How often do you snore

- ☐ a. Nearly every day
- ☐ b. 3-4 times a week
- ☐ c. 1-2 times a week
- ☐ d. 1-2 times a month
- ☐ e. Never or nearly never

4. Has your snoring ever bothered other people?

- ☐ a. Yes
- ☐ b. No
- ☐ c. Don't Know

5. Has anyone noticed that you quit breathing during your sleep?

- ☐ a. Nearly every day
- ☐ b. 3-4 times a week
- ☐ c. 1-2 times a week
- ☐ d. 1-2 times a month
- ☐ e. Never or nearly never

CATEGORY 2

6. How often do you feel tired or fatigued after your sleep?

- ☐ a. Nearly every day
- ☐ b. 3-4 times a week
- ☐ c. 1-2 times a week
- ☐ d. 1-2 times a month
- ☐ e. Never or nearly never

7. During your waking time, do you feel tired, fatigued or not up to par?

- ☐ a. Nearly every day
- ☐ b. 3-4 times a week
- ☐ c. 1-2 times a week
- ☐ d. 1-2 times a month
- ☐ e. Never or nearly never

8. Have you ever nodded off or fallen asleep while driving a vehicle?

- ☐ a. Yes
- ☐ b. No

If yes:

9. How often does this occur?

- ☐ a. Nearly every day
- ☐ b. 3-4 times a week
- ☐ c. 1-2 times a week
- ☐ d. 1-2 times a month
- ☐ e. Never or nearly never

CATEGORY 3

10. Do you have high blood pressure?

- ☐ Yes
- ☐ No
- ☐ Don't know

Epworth Sleepiness Scale

Unique ID: _____

How likely are you to doze off or fall asleep in the situations described below, in contrast to feeling just tired? This refers to your usual way of life in recent times.

Even if you haven't done some of these things recently try to work out how they would have affected you.

Use the following scale to choose the most appropriate number for each situation:

0 = would never doze

1 = Slight chance of dozing

2 = Moderate chance of dozing

3 = High chance of dozing

Situation Chance of dozing

Sitting and reading _____

Watching TV _____

Sitting, inactive in public place (e.g. a theatre or a meeting) _____

As a passenger in a car for an hour without a break _____

Lying down to rest in afternoon when circumstances permit _____

Sitting and talking to someone _____

Sitting quietly after a lunch without alcohol _____

In a car, while stopped for a few minutes in the traffic _____

Total _____

STOP-BANG Sleep Apnea Questionnaire

Chung F et al Anesthesiology 2008 and BJA 2012

STOP		
Do you SNORE loudly (louder than talking or loud enough to be heard through closed doors)?	Yes	No
Do you often feel TIRED , fatigued, or sleepy during daytime?	Yes	No
Has anyone OBSERVED you stop breathing during your sleep?	Yes	No
Do you have or are you being treated for high blood PRESSURE ?	Yes	No

BANG		
BMI more than 35kg/m ² ?	Yes	No
AGE over 50 years old?	Yes	No
NECK circumference > 16 inches (40cm)?	Yes	No
GENDER : Male?	Yes	No

TOTAL SCORE		
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Supplementary Material S4. Survey 3B: STOP Questionnaire

Appendix 1: STOP Questionnaire

Height _____ inches/cm Weight _____ lb/kg

Age _____ Male/Female BMI _____

Collar size of shirt: S, M, L, XL, or _____ inches/cm

Neck circumference* _____ cm

1. Snoring

Do you snore loudly (louder than talking or loud enough to be heard through closed doors)?

Yes No

2. Tired

Do you often feel tired, fatigued, or sleepy during daytime?

Yes No

3. Observed

Has anyone observed you stop breathing during your sleep?

Yes No

4. Blood pressure

Do you have or are you being treated for high blood pressure?

Yes No

* Neck circumference is measured by staff.

High risk of OSA: answering yes to two or more questions

Low risk of OSA: answering yes to less than two questions