

Supplements

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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High risk of OSA: Yes 5 - 8

Intermediate risk of OSA: Yes 3 - 4

Low risk of OSA: Yes 0 - 2

Sleep Apnea Clinical Score

Preoperative Questionnaire / Sleep Evaluation

Patient Name: _____

Date: _____

PATIENT: PLEASE ANSWER

- | | |
|---|---|
| <p>1. Have you ever been diagnosed with sleep apnea or use CPAP?
 <input type="checkbox"/> Yes <input type="checkbox"/> No
 If yes, are you using CPAP generally every night for more than 4 hours per night?
 <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. People who have shared (or are sharing) my bedroom tell me that I snore. Please pick the best response for the frequency of snoring:
 <input type="checkbox"/> I don't know
 <input type="checkbox"/> Never
 <input type="checkbox"/> Rarely (1-2 times per year)
 <input type="checkbox"/> Occasionally (4-8 times per year)
 <input type="checkbox"/> Sometimes (1-2 times per month)
 <input type="checkbox"/> Often (1-2 times per week)*
 <input type="checkbox"/> Usually (3-5 times per week)*
 <input type="checkbox"/> Always (every night)*</p> | <p>2. Do you have high blood pressure or have you been told to take medication for high blood pressure?
 <input type="checkbox"/> Yes
 <input type="checkbox"/> No</p> <p>4. I have been told by other people that I gasp, choke, snort or stop breathing while I am sleeping. Please pick the best response for the frequency of any of these symptoms:
 <input type="checkbox"/> I don't know
 <input type="checkbox"/> Never
 <input type="checkbox"/> Rarely (1-2 times per year)
 <input type="checkbox"/> Occasionally (4-8 times per year)
 <input type="checkbox"/> Sometimes (1-2 times per month)
 <input type="checkbox"/> Often (1-2 times per week)*
 <input type="checkbox"/> Usually (3-5 times per week)*
 <input type="checkbox"/> Always (every night)*</p> |
|---|---|

Neck Measurement: _____ cm

Total Number of Historical Features: _____

NURSING STAFF ONLY

<i>(Circle the patient's score)</i> Prediction of OSA - Sleep Apnea Clinical Score						
Neck Circ (CM)	<i>Not Hypertensive</i>			<i>Hypertensive</i>		
	Historical Features*			Historical Features*		
	None	One	Both	None	One	Both
<30	0	0	1	0	1	2
30-31	0	0	1	1	2	4
32-33	0	1	2	1	3	5
34-35	1	2	3	2	4	8
36-37	1	3	5	4	6	11
38-39	2	4	7	5	9	16
40-41	3	6	10	8	13	22
42-43	5	8	14	11	18	30
44-45	7	12	20	15	25	42
46-47	10	16	28	21	35	58
48-49	14	23	38	29	48	80
>49	19	32	53	40	66	110

*Historical Features: 1. Habitual snoring 2. Partner reports of gasping, choking or snorting

<p>Probability of sleep apnea</p> <p><input type="checkbox"/> Low – Sleep Apnea Clinical Score <8</p> <p><input type="checkbox"/> Borderline – Sleep Apnea Clinical Score 8-14</p> <p><input type="checkbox"/> High – Sleep Apnea Clinical Score ≥15</p>	<p><input type="checkbox"/> Patient may be a difficult intubation (micrognathic mandible, large tongue base, narrow oropharyngeal inlet, enlarged tonsils).</p> <p>Note: If checked, consider a PSG evaluation, especially if patient reports excessive daytime sleepiness in spite of a low Sleep Apnea Clinical Score.</p>
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Berlin Questionnaire®
Sleep Apnea

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 answered 'yes':

- 2. Your snoring is:**
 a. Slightly louder than breathing
 b. As loud as talking
 c. Louder than talking

- 3. How often do you snore?**
 a. Almost every day
 b. 3-4 times per week
 c. 1-2 times per week
 d. 1-2 times per month
 e. Rarely or never

- 4. Has your snoring ever bothered other people?**
 a. Yes
 b. No
 c. Don't know

- 5. Has anyone noticed that you stop breathing during your sleep?**
 a. Almost every day
 b. 3-4 times per week
 c. 1-2 times per week
 d. 1-2 times per month
 e. Rarely or never

Category 2

- 6. How often do you feel tired or fatigued after your sleep?**
 a. Almost every day
 b. 3-4 times per week
 c. 1-2 times per week
 d. 1-2 times per month
 e. Rarely or never

- 7. During your waking time, do you feel tired, fatigued or not up to par?**
 a. Almost every day
 b. 3-4 times per week
 c. 1-2 times per week
 d. 1-2 times per month
 e. Rarely or never

- 8. Have you ever nodded off or fallen asleep while driving a vehicle?**
 a. Yes
 b. No

If you answered 'yes':

- 9. How often does this occur?**
 a. Almost every day
 b. 3-4 times per week
 c. 1-2 times per week
 d. 1-2 times per month
 e. Rarely or never

Category 3

- 10. Do you have high blood pressure?**
 Yes
 No
 Don't know

Scoring Berlin Questionnaire

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, and 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 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.