SNORING AND OBSTRUCTIVE SLEEP APNEA

Note: Underlined topics can be found in the Sleep Health Foundation Information Library at www.sleephealthfoundation.org.au

Part A: Snoring

1. Why do people snore?
You snore when part of your throat (also known as “pharynx” or “upper airway”) vibrates. When you are awake the throat muscles are active and open and stiffen it. But when you sleep, these muscles relax, and the throat can vibrate and may make a noise as you breathe in. The narrower the airway is, the more easily it will vibrate and the louder you will snore.

2. How common is snoring?
About 40% of men have at least mild snoring, on at least some nights. This number is smaller for women (around 30%). About 15% of people snore on most nights. People of any age can snore but the middle aged adults are most at risk. Even some children have a problem with snoring (see Childhood Snoring and Obstructive Sleep Apnea).

3. What can raise my risk of snoring?
- Being overweight or obese will mean you have more fat around the neck. This will make your throat narrower making it more likely that it will vibrate and create noise when you sleep.
- Some people are born with a smaller or floppier throat than normal. These people will have a higher chance of snoring.
- Some people snore because of narrowing caused by nasal problems or large tonsils. Children mostly snore because of large tonsils and adenoids
- Sleeping on your back makes your tongue fall directly back. This can get in the way of your airflow. Snoring is almost always worse on the back.
- Drinking alcohol will relax the muscles in your throat. This will mean more vibration and more sound.
- Some medications also make your throat muscles relax e.g. sleeping tablets.
- A blocked nose will cause you to breathe through the mouth. This raises your risk of snoring. Allergies, hay fever and smoking can make snoring worse because they tend to narrow the nasal passages.
- Snoring is more likely in pregnancy (see Pregnancy and Sleep).

4. How does it affect people?
For many families snoring is a big problem. Often, the snorer has to sleep alone in another room. Some snorers also have a more serious condition known as obstructive sleep apnea (see Part B below). Over 10% of regular snorers have this condition to a significant degree.

5. How is snoring treated? And what can I do to help?
- Lifestyle changes
  - If you are overweight, losing the extra kilos will reduce the intensity of your snoring and may cause it to stop completely.
  - Reducing your alcohol intake at night will also decrease snoring.
Part B: Obstructive Sleep Apnea

Snoring is often present in a more serious condition – Obstructive Sleep Apnea (OSA)

1. What is it?
Patients with obstructive sleep apnea (OSA) have repeated episodes of partial or complete obstruction of the throat during sleep. This occurs because the throat is narrower or floppier than normal, which makes it more likely to obstruct when the throat muscles relax with sleep. Breathing is reduced or may pause for a short time with these episodes and the blood oxygen levels fall. Pauses in breathing end by a brief interruption to sleep, which may be as little as 3 seconds. This allows breathing to start again. These episodes may happen many times – even hundreds of times – during the night, severely disturbing sleep. Some people know that their breathing is not normal at night, but may be unaware that this is a medical problem.

2. What are the symptoms of obstructive sleep apnea?
If you have OSA you may snore, toss and turn and others may notice that you stop breathing during the night. You may complain of waking up during the night gasping and choking. In the morning, you may still feel tired because of the disturbed sleep. As the day goes on, you may struggle to stay awake, especially in the afternoon. Grumpiness and other mood changes are common in untreated OSA.

3. Obstructive sleep apnea affects families
Snoring can keep a bed partner awake and sometimes people in other parts of the house. Some partners try to stay awake to make sure that the person with OSA starts breathing again every time that they stop. Lack of sleep may make people who are living with a person with OSA more grumpy and irritable. OSA is a problem not only for the person with it, but also other family members.

4. Why you should worry if you have obstructive sleep apnea symptoms
There is strong evidence that people with moderate to severe OSA have other health problems. If you have OSA, you are more likely to have high blood pressure and other cardiovascular disease than someone without it. Each time you stop breathing, your blood pressure may go up. Over time, this may also contribute to high blood pressure during the day (hypertension). There is also evidence that having OSA, particularly if severe, may increase the risk of diabetes, heart attack or stroke, and treating sleep apnea may reduce these risks.

5. Obstructive sleep apnea causes motor vehicle accidents
People with OSA are approximately two and half times more likely to have a motor vehicle accident than others. Broken night-time sleep leads to less alertness, slower reaction times, poor concentration and more chance of falling asleep at the wheel. Also, if your job involves operating machinery or transport, the risk of accidents increases.

6. Who gets obstructive sleep apnea?
OSA can occur at any age. In children, it is often the result of enlarged tonsils or adenoids (see Childhood Snoring and Obstructive Sleep Apnea). In adults, OSA is more common in middle age and in older people. It is also more common in men than in women, although after menopause the risk is the same. Many people with OSA are overweight. Being overweight can cause a narrowing of the airway due to fatty tissue. Also, having a large waistline can make the lungs smaller during the night, which makes the airway more likely to collapse. Some people are born with a narrow airway or have a facial structure which leads to narrow airways.
7. How is obstructive sleep apnea diagnosed?

Signs and symptoms such as snoring, obesity, observed breathing pauses and sleepiness during the day may suggest that a person has OSA. The best way to be really sure is with an overnight Sleep Study. This measures your sleep, breathing and oxygen levels.

8. How is obstructive sleep apnea treated?

For people with a mild level of OSA and few symptoms, losing weight, decreasing the amount of alcohol consumed in the evening or adjusting the sleeping position may be all that is needed. However, for those with moderate or severe OSA more active intervention is often required. This is particularly so if daytime tiredness is present or there is a background of heart disease, stroke or high blood pressure that has been difficult to control. The two most commonly used treatments for moderate to severe OSA are nasal continuous positive airway pressure (CPAP) or an Oral Appliance.

CPAP uses a small, quiet air pump that takes air from the room and delivers it under gentle pressure to a mask that covers your nose. This acts to hold your throat open during the night. You only use CPAP at night in bed. It is very good in controlling the symptoms and the long term effects of sleep apnea. It stops the snoring and the machine noise is much quieter than the snoring was. Sometimes it takes a while to get used to CPAP and tips to help can be found on our CPAP - Making It Work For You fact sheet.

For some people an Oral Appliance (or mandibular advancement device), fitted by a specialist dentist, is suitable. It is like a double mouthguard that goes over both the upper and lower teeth. The upper and lower mouthguards clip together, so that the jaw is held forward during the night and this helps keep the airway open. These devices are particularly useful for snoring and milder forms of sleep apnea.

There are several surgical operations available for sleep apnea. These are not usually offered unless both CPAP and oral appliances have not worked. It is important to select the right operation and an experienced surgeon is essential.

A number of other remedies have been marketed, some of which have value for selected patients while many others have been shown to be of no benefit.

9. Other things you can do if you have sleep apnea.

In many people, being overweight contributes to sleep apnea. Losing weight may help or even cure the OSA and is extremely beneficial for other health problems, including high blood pressure, diabetes, high cholesterol and joint problems.

If you are diagnosed with OSA, it is a good time to make sure that you are doing everything right to improve your sleep. Alcohol and sleeping tablets relax muscles and may worsen sleep apnea. Their use should be minimised. It is important to make sure that you are having a regular sleep pattern and sleep as well as possible. See Good Sleep Habits.

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