

# Snoring and Sleep Apnea

Breathing Problems While You Sleep

## **Simply Snoring or Something More?**

If you snore, you may know about nightly jabs in the ribs and grumbling from your bed partner, or complaints from neighbors. The noise you make can disrupt their sleep – and your own. It may even be a sign of a more serious problem called **sleep apnea**.

### **Snoring is Annoying**

Snoring may harm your sleep and the sleep of your bedmate or people in other rooms. This can put a strain on your relationships. Snoring can also be the first sign of sleep apnea, a serious health condition.

### **Sleep Apnea is Serious**

If you have sleep apnea, your throat becomes blocked during sleep. You stop breathing for short periods of time. To breathe, you must briefly wake up. The cycle repeats many times throughout the night. Besides snoring you may:

- Gasp or snort in your sleep
- Wake up tired after a full nights sleep
- Wake up with a headache
- Feel very sleepy during the day
- Fall asleep easily without meaning to
- Have problems with memory or concentration
- Be cranky or short-tempered

Sleep apnea also makes you more likely to develop certain other health problems, such as high blood pressure, heart attack, and stroke.

### **A Range of Treatment Options**

Your doctor can discuss with you the various treatment options for snoring and sleep apnea. Treatment can help you breathe freely again so you get a good night's sleep.

### **Diagnosing the Problem**

To determine the best treatment, your doctor will ask about your sleep problem and examine you. An overnight sleep study may also be suggested. This study helps show whether or not your snoring is due to sleep apnea.

### **History**

Your doctor may ask about:

- How long you've snored
- Your sleep habits
- How well you sleep and whether you're sleepy during the day
- Your lifestyle and your work
- Medical conditions you have
- Medications you take
- The impact of snoring or other symptoms on your life and the life of anyone who lives with you

## **Get the Adjustments you Need**

Any CPAP setup must be tailored to meet your needs and preferences. So expect several adjustments before the setup suits you. Don't get discouraged—give it some time. Talk about your needs and wants with your healthcare provider or your CPAP technician.

## **Surgical Treatment**

The goal of most surgeries for breathing problems is to widen the airway. This is done by taking out or shrinking excess tissue where the mouth meets the throat. Some procedures are only for snoring and will not help sleep apnea.

### **UPPP--uvulopalatopharyngeoplasty**

This is the most common procedure for sleep apnea. It trims the soft palate and uvula, and removes the tonsils and other tissue. It is major surgery performed in a hospital.

#### **Risks and complications:** \_\_\_\_\_

Bleeding, throat pain, nasal-sounding speech, scarring, liquids sometimes going into nose when swallowing, false feeling that something is in throat.

### **Procedures for Snoring**

The procedures below help relieve snoring. LAUP may be used in some cases of mild apnea.

### **LAUP-laser assisted uvulopalatoplasty**

The doctor uses a laser or electric current to remove some of the soft palate and part or the entire uvula. This treatment may be done over several sessions in the doctor's office.

#### **Risks and complications:** \_\_\_\_\_

Same as for UPPP, but less likely to occur.

### **RFA-radio frequency ablation**

The doctor uses radio waves to reduce the size of the turbinate or uvula, nearby tissue, and sometimes the back of the tongue.

#### **Risks and complications:** \_\_\_\_\_

Mouth ulcer, nerve pain, swelling in airway, pocket of pus (abscess) on tongue.

## **Other Procedures**

Nasal and jaw surgery may be recommended in some cases. They can help correct nose or jaw problems that contribute to snoring and apnea.

### **Nasal Surgery**

Problems in the nose are not usually the main cause of snoring or apnea. But they can make either problem worse and make CPAP harder to use. If blockage in your nose is severe, surgery can improve the airflow. It can reduce the size of the turbinate, straighten a deviated septum, and remove any polyps (overgrowth of sinus lining).

#### **Risks and complications:** \_\_\_\_\_

Bruising, bleeding, damage to or perforation of septum, dryness in nose

## **Jaw Surgery**

If your jaw sits too far back, your tongue may also be too far back. That makes the tongue more likely to block the airway when you sleep. Moving the jaw forward moves the tongue forward and widens the airway overall.

### **Risks and complications:** \_\_\_\_\_

Jaw may not heal properly. You may lose teeth or need orthodontic treatment to realign teeth. Feeling in jaw or teeth may be disturbed. Your facial appearance will change.

## **More Severe Cases**

If your apnea is severe and no other treatment helps, other kinds of surgery may help. Your doctor can tell you about them. Be sure you understand their risks as well as their benefits.

## **Your Surgery and Follow-Up**

Some procedures are done in the doctor's office. Others are done in a hospital or surgery center. If you have a hospital procedure, you may stay 1 to 2 nights. Be sure to follow up with your doctor after your procedure.

## **Notes About Surgery**

Whatever kind of surgery you have for snoring or apnea, keep in mind:

- There's no guarantee that surgery will solve the problem. And surgery may sometimes stop the snoring but not the apnea. So you will need a follow-up sleep study to check the effects of your surgery and to help decide what further treatment you might need.
- You may have blockage in more than one place. So you may need more than one procedure.
- Surgery may be combined with other kinds of treatment.
- Any surgery has a chance of complications, including bleeding and infection.

## **Recovering from Surgery**

After surgery, your nose, throat or jaw may be sore for a few days to several weeks. Full recovery may take weeks or months. During this time, you may need to eat only soft foods.

## **Keep Track of Changes**

It's important that you and your partner both keep track of any changes in your sleep and health. What is better? How much better? Is anything worse? Tell your doctor.

## **Air Pressure Adjustments**

If you use CPAP after surgery, ask your doctor when to start using it. Keep your doctor informed about how well CPAP is working for you. If anything about it is uncomfortable, have it adjusted.

## **Moving the Jaw Forward**

Most mouthpieces move the jaw and tongue forward. That keeps the tongue from blocking the airway. Mouthpieces can work well, but they are not for everyone. Work with your healthcare provider to get a mouthpiece that fits just right for you. And avoid over-the-counter mouthpieces—they often do not work.

## **Tips**

To have the most success with your mouthpiece, keep these tips in mind:

- It will take some time to get used to wearing a mouthpiece. At first it may feel uncomfortable or make your mouth water. If these problems last, tell your health care provider.
- Expect several rounds of adjustments to get the mouthpiece to fit and work just right for you.
- Mouthpieces don't cure the problems that cause snoring or apnea. So you need to use your mouthpiece all night, every night.
- Follow your healthcare provider's instructions for keeping the mouthpiece clean.
- When your mouthpiece is not on your mouth, store it in its case.

## **Air Pressure Treatment**

**Continuous Positive Air Pressure (CPAP)** uses gentle air pressure to hold the airway open. CPAP is often the most effective treatment for sleep apnea and severe snoring. It works very well for many people, but keep in mind that it can take several adjustments before the setup is right for you.

## **How CPAP Works**

A small portable pump beside the bed sends air through a hose, which is held over your nose by a mask. Air is gently pushed through your airway. The air pressure nudges sagging tissues aside. This widens the airway so you can breathe better. CPAP may be combined with other kinds of therapy for sleep apnea.

## **Types of Air Pressure Treatments**

There are different types of CPAP. Basic CPAP keeps the pressure constant all night long. A bi-level device gives more pressure when you breathe in and less when you breathe out. An auto CPAP device automatically adjusts pressure throughout the night in response to changes such as body position, sleep stage, and snoring. Your doctor or CPAP technician will help you decide which type is best for you.

## **Getting Used to CPAP**

CPAP takes some getting used to. If there is anything about CPAP you don't like, chances are there is a solution.

## **Finding the Best Fit**

Your healthcare provider can help you find the mask that fits you best. He or she will also set the air blower on your CPAP. A sleep study will determine the air pressure you need. When you bring your CPAP home, practice wearing it during the day. At night, wear the mask as long as you can, even if it's just a few hours. You should see the results in a week or so. If you have trouble with CPAP, don't just give up. There are many ways to improve comfort. A different style or custom-made mask may be an option.

## **Tips for Wear and Care**

For best results when using you CPAP, try these tips:

- Wear CPAP all night, every night, and during all naps. Keep using CPAP even when you travel.
- Ask your healthcare provider to adjust the air pressure if you lose or gain weight.
- Try using a special humidifier unit with your CPAP.
- Keep your mask clean and wash it often
- Make yourself comfortable sleeping with CPAP. Try some extra pillows

## **Changing Some Habits May Help**

Changing a few habits may be all you need to stop snoring and prevent mild sleep apnea. Even if you need further treatment, these changes are a good place to start. You can try these following things to help:

**Sleep on your side-** when you sleep on your back, gravity pulls relaxed throat tissues down, blocking the airway. So sleeping on your side may reduce the blockage. That may mean less snoring and less apnea. To prevent rolling onto your back, try putting tennis balls (or other round objects) into a sock sewn onto the back of your pajamas.

**Lose Weight** – Excess weight makes the structures in your throat more bulky and floppy. That makes breathing harder and snoring and apnea worse. Ask your doctor for a weight-loss program. Being more active throughout the day and choosing healthier foods can help you lose weight.

**Avoid Alcohol and Certain Medications-**Alcohol or medications such as sedatives, sleeping pills, and some antihistamines relax your throat muscles more than usual. That may cause or worsen blockage, snoring, and apnea. Avoid alcohol 3 to 4 hours before bedtime. Talk to your doctor about your medications.

**Unblock Your Nose-** A stuffy nose makes snoring and apnea worse. If you have allergies or sinus problems, ask your doctor for help. If you have nasal problems, nasal strips may make breathing easier. Smoking worsens a stuffy nose, so if you smoke, quit.

### **Mouthpieces**

For simple snoring or mild to moderate apnea, a special mouthpiece may help. A dental specialist works with your doctor to build and fit a mouthpiece just for you. A follow-up sleep study checks how well the device is working for you. Mouthpieces are also called oral appliances.

### **Physical Exam**

Your doctor may check your mouth, throat, and nose. Your weight, blood pressure, heart rate, and neck size may all be recorded. Your doctor may insert a thin, flexible tube through your nose into your throat to check the throat tissues. You may also need lab tests and x-rays.

### **Sleep Study**

A sleep study gives the best picture of how you breathe when you sleep. Your doctor may ask you to spend a night at a sleep clinic, or you may be loaned a small monitor to use at home. Either way, your breathing, heart rate, oxygen level, and other functions are measured and recorded. The findings help determine which treatments will best help you.

### **Breathing During Sleep**

When you breathe, air travels through passages in your nose and throat. When these air passages are wide enough to let air flow freely, you breathe normally. If the passages become narrowed, you may snore. If they become blocked and you can't breathe, you have sleep apnea.

### **Nasal Structures**

The septum is the wall that divides the left half of the nose from the right half. Turbinate's are ridges in the nasal passage.

### **Throat Structures**

Air flows past soft, flexible structures where the mouth meets the throat: the soft palate, uvula, tonsils, and back of the tongue. Throat muscles hold those structures in place. While you sleep, the throat muscles relax a bit, but they normally stay tight enough to keep the airway open.

### **Snoring**

If the structures in your throat are bulky or throat muscles relax too much, the airway may be partly blocked. Air flowing through the throat makes these structures vibrate. That vibration is what causes snoring.

## **Sleep Apnea**

Blockage in the throat can partially or completely stop air from flowing. If this happens, the brain tells the body to wake up just enough to tighten the muscles and open the airway. This cycle may repeat many times during the night.

## **Problems in the Nose and Jaw**

Problems in the structure of the nose may obstruct breathing. A crooked (deviated) septum or swollen turbinates can make snoring worse or lead to apnea. Also, a receding jaw may make the tongue sit too far back, so it is more likely to block the airway when you are asleep.

## **Monitoring Your Sleep**

Your doctor may order a sleep study as part of your evaluation. A sleep study tracks and records body functions while you sleep.

## **Overnight in the Sleep Clinic**

If you spend a night in a sleep clinic, you will have a private bedroom. A technician will attach many sensors to your body, and then go into another room. As you sleep, your heart rate, breathing, and other functions will be monitored. A microphone and video camera will record your breathing sounds and body movements. The technician will keep watch nearby, if you need an air pressure device to help you breathe, one will be available.

Follow the instructions that the sleep clinic gives you to prepare for your sleep study. These may include:

- Bathe and wash your hair before the sleep study. Do not use lotion, oils, or make up on your skin.
- Stick to your normal routine, ask if you should do anything different
- Bring your pillow, sleepwear, something to read, and anything else that will help you sleep well.

## **In Your Own Bed at Home**

A home sleep study may record many of the same things as in the clinic. You will learn how to attach the sensors to your body. You may also have help from a technician. At bedtime you plug the sensors into a small computer and turn it on. In the morning, you will remove the sensors and return the computer so the results can be studied.

You will be given instructions for how to set up the sensors and the computer. Doing so will be simple. For best results:

- Be sure you understand what to do before bedtime
- Stick to your normal routine. Ask your healthcare provider if you should do anything differently the night of the study.
- If you get up during the night, reconnect the sensors to the computer or to yourself correctly.

- Get as many hours of sleep you can

### **Notes to the Partner**

Snoring and sleep apnea affect your life, too. You can help in the treatment of the problem by supporting and encouraging your partner.

### **Adjusting to Changes**

You can help your partner make and stick with the change of habits. For instance, support and even join his or her exercise program. If your partner gets CPAP, he or she may feel self-conscious at first. Your support can help. Remind your partner to expect adjustments to CPAP before it feels right. Consider joining a snoring and sleep apnea support group.

### **Go Along to See the Doctor**

You can give the doctor the best account of your partner's nighttime breathing and snoring patterns. Try to go along to the doctor's appointments. If you can't go, write notes for your partner to give to the doctor. Describe your partner's snoring and breathing patterns in detail.

### **Tips for Sleeping with a Snorer**

Until treatment takes care of your partner's snoring:

- Try to go to bed first, it may help if you're already asleep when your partner snores
- Wear earplugs to bed. A fan or other source of background noise may also help drown out snoring

### **Peaceful Sleep for Both of You**

Work with your doctor to get the most out of your treatment plan. Sleep apnea can lead to serious health problems. Treatment can help prevent those problems. It can also help you and your partner get quiet, restful sleep, which will let you wake up feeling alert, refreshed, and ready to face the day.