

Snoring: Not Funny, Not Hopeless

Some 45 percent of normal adults snore at least occasionally, and 25 percent are habitual snorers. Problem snoring is more frequent in males and overweight persons, and it usually grows worse with age.

More than 300 devices are registered in the U.S. Patent and Trademark Office as cures for snoring. Some are variations on the old idea of sewing a tennis ball on the pajama back to force the snorer to sleep on his side. (Snoring is often worse when the person sleeps on his back.) Chin and head straps, neck collars, and devices inserted into the mouth are usually disappointing as snoring cures. Many electrical devices have been designed to produce painful or unpleasant stimuli when the patient snores. The presumption was that a person could be trained or conditioned not to snore. Unfortunately, snoring is not under the person's control whatsoever; and if these devices work it is probably because they keep the snorer awake.

What Causes Snoring?

The noisy sounds of snoring occur when there is an obstruction to the free flow of air through the passages at the back of the mouth and nose. This is the collapsible part of the airway (see illustration) where the tongue and upper throat meet the soft palate and uvula (the fleshy structure that dangles from the roof of the mouth back into the throat). When these structures strike against each other and vibrate during breathing, that is snoring. Persons who snore have at least one of the following problems:

Poor muscle tone (lack of tightness) in the muscles of the tongue and throat. Flabby muscles allow the tongue to fall backwards into the airway or allow the throat muscles to be drawn in from the sides into the airway. This occurs when the person's muscular control is too relaxed from alcohol or from drugs which cause sleepiness. It also happens in some persons when they relax in the deep-sleep stages.

Excessive bulkiness of tissues of the throat. Large tonsils and adenoids, for example, commonly cause snoring in children. Overweight persons also have bulky neck tissues. Cysts or tumors could also be present, but they are rare.

Excessive length of the soft palate and uvula. A long palate may narrow the opening from the nose into the throat. As it dangles in the airway, it acts as a flutter valve during relaxed breathing, and contributes to the noise of snoring. A long uvula makes matters even worse.

Obstructed nasal airways: when a person has a stuffy or blocked-up nose, he must pull hard to inhale air through it. This creates an exaggerated vacuum in his throat, in the collapsible part of the airway, and it pulls together the floppy tissues of the throat. So snoring occurs even in persons who would not snore if they could breathe through the nose properly. This explains why some people snore only during the hay fever season, or when they have a cold or sinus infection. Also, deformities of the nose or nasal septum frequently cause such obstruction. "Deviated septum" is a common term for a deformity inside the nose in the wall that separates one nostril from the other.

Is Snoring Serious?

Socially - yes. It is disruptive to family life. It makes the snorer an object of ridicule and

causes other household members sleepless nights and resentment. Snorers become unwelcome roommates on vacations or business trips.

And medically - yes. It disturbs the sleeping patterns of the snorer himself, so that he may not sleep restfully. Furthermore, heavy snorers tend to develop high blood pressure at a younger age than non-snorers.

The most exaggerated form of snoring is known as obstructive sleep apnea, when loud snoring is interrupted by frequent episodes of totally obstructed breathing. This is serious if the episodes last over 10 seconds each and occur more than 7 times per hour. Your physician may recommend a laboratory sleep study as a way of evaluating your symptoms. Apnea patients may experience 30 to 300 obstructed events per night, and many spend as much as half their sleep time with blood oxygen levels below normal. During their obstructive episodes, the heart must pump harder to circulate the blood faster. This can cause irregular heartbeats, and after many years it leads to elevated blood pressure and heart enlargement. The immediate effect of this oxygen starvation is that the person must sleep in a lighter stage and tense his muscles enough to open his airway to get air into his lungs. Since snorers with severe sleep apnea are often unaware of it, laboratory sleep study may be the only way to discover it.

Persons with obstructive sleep apnea may spend little of their night-time hours in the deep-sleep stages that are essential for a good rest. Therefore, they awaken unrefreshed and are sleepy much of the day. They may fall asleep while driving to work or while on the job.

Can Snoring be Cured?

By far the majority of snorers can be helped. For adults who are mild or occasional snorers, the following self-help remedies are worth trying.

- Adopt an athletic life-style and exercise daily to develop good muscle tone and lose weight.
- Avoid tranquilizers, sleeping pills, and antihistamines before bedtime.
- Avoid alcoholic beverages within 3 hours of retiring.
- Avoid heavy meals within 3 hours of retiring.
- Avoid getting overtired; establish regular sleeping patterns.
- Sleep sideways rather than on the back. Consider sewing a pocket on the pajama back to hold a tennis ball. This helps to avoid sleeping on your back.
- Tilt the entire bed with the head upwards (place a brick under the bedposts at the bedhead).
- Allow the non-snorer to get to sleep first.
- Heavy snorers, those who snore in any position they sleep in, and so-called "obnoxious snorers" need more help than the suggestions above.

When snoring becomes disruptive to the life of the snorer or his family, medical advice should be sought, especially if other household members suspect the obstructive sleep apnea problem (very loud snoring with periods when all airflow stops - even though the snorer is trying to breathe).

The heavy snorer deserves a thorough examination of the nose, mouth, palate, throat, and neck. Studies in a sleep laboratory are valuable to determine how serious the snoring is and what effects it has on the snorer's health. Treatment will depend, of course, on the diagnosis. It may be as simple as managing a nasal allergy or infection, surgically correcting a nasal deformity, or removing tonsils and adenoids. Or, the snoring may respond best to surgery on the throat and palate to tighten up flabby tissues and expand the air passages. This is a recently developed operation called the UvuloPalatoPharyngoPlasty (UPPP). To the patient it feels like having a

tonsillectomy. Life-threatening cases of obstructive sleep apnea might require a tracheotomy (an operation which creates an opening into the windpipe).

Every chronically snoring child should also be thoroughly examined. Medical evidence suggests a tonsillectomy and adenoidectomy will probably make an important difference in the health and well-being of the child.

Remember, snoring means obstructed breathing, and obstruction can be serious. It's not funny, and it's definitely not hopeless.