



Treatment Options for Adults with Snoring

Introduction

Snoring is a sound produced by vibration of the soft tissues of the upper airway during sleep and is indicative of increased upper airway resistance. Studies estimate that 45% of men and 30% of women snore on a regular basis. It can affect not only the snorer's sleep but also the sleep of a spouse or other family members nearby. In fact, snoring causes many couples to sleep in separate rooms and often places strain on marriages and relationships. Recent evidence suggests that snoring may even cause thickening of the carotid arteries over time and potentially increase risk of stroke.

Snoring also may be a sign of a more serious health condition known as obstructive sleep apnea (OSA), characterized by a repetitive stopping or slowing of breathing that can occur hundreds of times through the night. Most patients who snore should receive a comprehensive sleep evaluation, by a trained physician, that often includes sleep testing either done in the home or sleep laboratory.

1) Palatal stiffening procedures

- **Palatal Implants**

Palatal implant therapy, also known as the Pillar procedure, involves the placement of three polyester implants into the soft palate under local anesthesia in the office. The implants, in conjunction with the body's scarring response, result in stiffening of the palate, and subsequently, less vibration and flutter that causes snoring. Potential benefits of this method include ease of application, minimal discomfort, fast recovery, and potentially more long-term benefit. Complications are rare but include implant extrusion requiring replacement. The primary drawback for many patients considering this option is the relatively high cost of the implants.

- **Injection Snoreplasty**

In this method, also done under local anesthesia in the office, a chemical is injected into the soft palate. The subsequent inflammation and scar tissue stiffen the palate, therefore, decreasing vibration and snoring. The most commonly used agent is Sodium tetradecyl sulfate which has been used in the treatment of varicose veins. Injection snoreplasty has

the advantage of lower cost than other methods but is associated with more pain and recovery time. Some patients may also require additional injection treatments to achieve optimal results.

- **Radiofrequency**

Radiofrequency treatment, also an office-based procedure performed under local anesthesia, uses heat to stiffen portions of the soft palate. Multiple treatment sessions may be required to achieve the desired results. Discomfort and recovery are generally less than injection snoreplasty but more than palatal implants. Cost of radiofrequency also usually falls in between the other two options.

2) Tonsillectomy/adenoidectomy

Enlarged tonsils and adenoids are a common cause of snoring and sleep disruption in children. The tonsils are clusters of lymphoid tissue in the back of the throat while the adenoids are a similar mound of tissue in the back of the nose. Although less commonly a problem in adults, some adults can receive excellent resolution of snoring through removal of enlarged tonsils and/or adenoids.

As opposed to the above office-based procedures, tonsillectomy/adenoidectomy is an outpatient surgery performed in the operating room under general anesthesia. Most patients require a recovery time at home of approximately one week but may continue to experience a sore throat for two weeks. The most common complication is bleeding, often occurring over a week after the surgery. Serious bleeding is rare.

3) Nasal Surgery

Increased nasal congestion has been shown to cause or contribute to snoring. Nasal obstruction may result from many causes including allergies, polyps, septal deviation, and turbinate hypertrophy. Medical treatment options, such as a nasal steroid spray or allergy management may be helpful in some patients. Structural problems, such as a deviated septum, often benefit from surgical treatment.

One surgical option, known as radiofrequency turbinate reduction (RFTR), can often be performed in the office setting under local anesthesia. RFTR uses radiofrequency heat to shrink swollen tissues in each side of the nose. Other nasal surgeries, including septoplasty and polyp removal, are usually performed in the operating room under general anesthesia. In select patients, treatment of nasal congestion can result in improvement or resolution of snoring.



What else should I know?

There are also other available treatments such as oral appliances, nasal devices, positional therapy, and a variety of over-the-counter products. Careful patient and procedure selection is critical to successful management of snoring. Talk to your Ear, Nose and Throat doctor for a complete evaluation and to learn what treatment may be best for you.



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