Sleep Surgery

Background

Sleep surgery includes procedures to help people with snoring and/or obstructive sleep apnea. Snoring is the sound produced by the vibration of soft tissue in your upper airway, when air inspired is obstructed at some level. Snoring severity varies, and is estimated to occur in 30-50% of adults, most commonly in men.

Snoring may be a sign of a more serious condition, Obstructive Sleep Apnea (OSA). OSA is diagnosed by a Polysomnogram (PSG), also known as a sleep study. This requires an overnight stay at a sleep lab for diagnosis. OSA is diagnosed when there have been multiple episodes of breathing pauses greater than 10 seconds, secondary to upper airway narrowing or collapse.

It is important to seek treatment after diagnosis of OSA. Untreated OSA increases your risk of heart disease, high blood pressure, stroke, diabetes, depression and weight gain.

Generally, wearing a CPAP (continuous positive airway pressure) mask at night is the first line treatment. Surgery is often offered to patients who have been unable to tolerate the CPAP, or if the area of obstruction may be best served by surgically modifying the airway anatomy.

Things you can do at home to help

- Establish regular sleep patterns
- Elevate the head of your bed a few inches
- Sleep on your side instead of your back
- Adopt a healthy lifestyle including frequent exercise
- Lose weight (if you are overweight)
- Avoid alcohol and meals at least four hours before bed

Common Sleep Surgeries

Sleep Endoscopy
Sleep endoscopy allows the surgeon to study the airway of an OSA patient during a drug-induced sleep to determine the level of obstruction and which operation, if any, would be beneficial to the patient. The patient is put to sleep and monitored by an anesthesiologist, while the surgeon uses a small camera (also known as an endoscope) to evaluate the patient’s upper airway including the nose and throat. This is an outpatient procedure that takes approximately 30 minutes including anesthesia.

Procedures Addressing Nasal Obstruction

Septoplasty
The septum of the nose is a wall made of cartilage and bone that divides the two sides of the nose. The septum can be deviated or bent, due to a broken nose or sometimes it just develops that way. A deviated septum generally creates breathing problems on one side of the nose and does not change from time to time. A septoplasty improves breathing through the nose and reduces snoring. It can help sleep quality, as well as improve CPAP tolerance.

This is an outpatient procedure that generally takes 1.5 to 2 hours with anesthesia. Nosebleeds can occur in the first few days after surgery. Rarely, a hole may occur in the septum causing crusting, bleeding or a whistling noise. Although rare, the external appearance of your nose may change.
**Inferior Turbinate Reduction**
There is one inferior turbinate at the front of each nasal cavity. There is a bony portion and a soft tissue portion. Their role is to help in filtering, warming and humidifying air. Occasionally, they become too large and cause difficulty breathing through your nose. Medications are often the first line for treatment, including nasal steroid spray; however, surgical reduction can be performed to help improve breathing through the nose and reduce snoring. Surgical reduction also improves sleep quality.

This is an outpatient procedure that generally takes about 1.5 to 2 hours with anesthesia. Nosebleeds are common the first few days after surgery.

**Procedures Addressing the Lower Throat (back of tongue)**

**Hyoid Suspension**
The hyoid bone is a U-shaped bone in the front of the neck, located just below the chin and just above the thyroid cartilage (Adam’s apple). Various tongue and throat muscles attach to this fairly mobile bone.

Hyoid suspension stabilizes the hyoid bone to the jaw bone (mandible) with a set of sutures and two small screws that are placed in the jaw bone. This helps prevent the collapse of the tongue muscles and epiglottis during sleep (when they relax). This procedure is performed in OSA patients who are found to have tongue base and/or epiglottis collapse during sleep endoscopy.

This is often an outpatient procedure that generally takes about 1.5 to 2 hours with anesthesia. If your OSA is severe, you may be kept overnight for monitoring.

The procedure involves placing a small skin incision (4 cm) over the hyoid bone in the anterior neck in a natural crease, or it may involve two smaller incisions. It is closed with dissolvable stitches, and sometimes a drain is placed for one to two days. Bleeding, infection and difficulty swallowing are risks that may occur with the procedure, but these are rare.

**Tongue Base Reduction**
Similar to the indications for procedures that advance the base of tongue (as above), this procedure involves reducing the amount of tissue from the tongue base via the application of radiofrequency waves or excision (midline glossectomy).

Patients are observed overnight to evaluate the airway through the use of extreme heat near the throat. All incisions, if any, are inside the mouth. Airway swelling, disturbance of taste, bleeding, infection, and difficulty swallowing are uncommon complications that may occur with surgery.

**Procedures Addressing the Upper throat (palate, uvula, tonsils)**

**Tonsillectomy**
Tonsils are glands at the back of your throat. A tonsillectomy is surgery to remove the tonsils. This is often performed in conjunction with the procedures below to address primarily oropharyngeal or “upper throat” tissue collapse and/or address a lack of space.

This is often an outpatient procedure that generally takes about 0.5 to 1 hour with anesthesia. If your OSA is severe, you may be kept overnight for monitoring.

All incisions are made inside the mouth. Bleeding and difficulty swallowing are uncommon complications after the procedure.
**Anterior Palatoplasty**
This procedure involves removing a small piece of mucosa (no muscle is removed) from your palate (the area above your uvula, which is the piece of tissue you can see hanging down in the middle of your throat). This lifts the palate and creates more vertical space within the upper part of the throat. Additionally, the uvula is sometimes trimmed.

This is often an outpatient procedure that generally takes about 0.5 to 1 hour with anesthesia. If your OSA is severe, you may be kept overnight for monitoring.

All incisions are made inside the mouth. Bleeding and difficulty swallowing are uncommon complications after the procedure.

**Expansion Pharyngoplasty**
This procedure involves repositioning tissue within your upper throat to help ensure the palate does not collapse or fall backwards during sleep. Specifically, this procedure involves cutting muscle posterior to your tonsil and pulling it forward to attach it to the soft palate. Additionally, the uvula is sometimes trimmed.

This is often an outpatient procedure that generally takes about 1 to 1.5 hours with anesthesia. If your OSA is severe, you may be kept overnight for monitoring.

All incisions are made inside the mouth. Bleeding and difficulty swallowing are uncommon complications after the procedure.

**Surgery Date**
Our surgery scheduler will work with you to find a convenient date for your surgery. When you call our clinic the day before surgery, you will be told where (Day Surgery Center for adults and adolescents, Children’s of Mississippi for children) and when to arrive for surgery. You will also be given any instructions such as to when to stop eating or drinking.

**Pre-operative Evaluation**
You will be sent to the anesthesiology pre-op clinic or contacted by phone to be evaluated by the anesthesiology team prior to your surgery date. This is because most surgery is done under general anesthesia, except for sleep endoscopy, and requires review of your medications and medical history to ensure for the safest outcome.

**After Surgery**

1. You will be given a postoperative instruction sheet. Please follow these instructions closely.
2. You will be given an appointment for your first postoperative visit, either at the time we schedule your surgery or before you leave the hospital. It will usually be three weeks after surgery. It is important that you keep this appointment.
3. Pain is expected after surgery, especially in surgeries involving the tonsils or base of tongue, or those more involved. You will likely be given a narcotic medication to help with pain.
4. You may feel nauseated or groggy the first day after surgery. You should be able to get around the house alone the first day after surgery.
5. It is advisable to have someone stay with you the night of surgery, if you are not kept overnight at the hospital.
6. Most patients can go back to work with light activity in 10 days or less. Patients with more strenuous jobs that may require heavy lifting or straining should wait about 14 days to go back.
For Questions or Emergency Care

Call the office at 601-984-5160. You may need to speak with the doctor on-call.