Hyoid Suspension

The hyoid bone is a U-shaped bone in the neck located above the level of the thyroid cartilage (Adam’s apple) that has attachments to muscles of the tongue as well as other muscles and soft tissues around the throat. The hyoid bone is free to move around rather than firmly anchored in position, and this mobility may allow this area to collapse and cause airway blockage during sleep more easily. This procedure secures the hyoid bone to the thyroid cartilage and helps to stabilize this region of the airway.

How is hyoid suspension sleep apnea procedure performed?

This procedure is performed for patients with obstructive sleep apnea, and it is performed in the operating room under general anesthesia. A small (usually 7-8 cm or 3 inches) skin incision is made, ideally in a natural neck skin crease to camouflage the scar. Four stitches are placed around the hyoid bone and the upper portion of the thyroid cartilage to stabilize the hyoid bone. The skin incision is closed with stitches, and usually a small drain is placed for 1-2 days to allow any fluid to escape without being trapped underneath the skin.

POSTOPERATIVE INSTRUCTIONS

NOTIFY DR. FLETCHER IMMEDIATELY IF YOU HAVE ANY TROUBLE BREATHING OR IF ANY BLEEDING DEVELOPS!

Hospital stay and discharge
The major concerns while you are in the hospital are making sure you are breathing freely, having no bleeding, controlling your pain with oral medications, and drinking enough fluids to have no risk of dehydration. Many people ask if they need someone to stay with them at home. You do need someone to stay with you the first night home after discharge, for safety. Beyond that, it is helpful to have someone available and checking on you to provide assistance when needed, although they do not have to stay with you 24 hours a day, every day. Planning before surgery (for example, buying milk or nutritional supplements) will decrease the amount of help you need at home after surgery.

Pain control
Like most surgeries, there is pain in the recovery period. However, we want to control your pain to make you comfortable during your recovery. Some people try to “hang in there” or suffer
without taking pain medications. Controlling your pain is important for breathing, healing, and being able to swallow enough to maintain your nutrition.

While in the hospital, we will control your pain with oral medications, starting on the day of surgery. You can also hold ice chips inside your mouth to decrease swelling and reduce pain. Although we will use intravenous pain medications if necessary, the goal will be to use oral medications alone because this is what you will use when you go home after surgery. You will not receive a prescription for pain medications before surgery, as we will send you home with the type of medication and the amount that worked well for you in the hospital.

When you are at home, take your pain medication as you need it. You can also continue to hold ice chips inside your mouth to decrease pain and swelling. Try not to let the pain increase until it becomes intolerable before you take the medication. If you are running out of medication and need more, please call the office in advance to obtain another prescription. If you prefer to avoid narcotics, you should feel free to use acetaminophen (Tylenol®). Avoid aspirin, NSAIDs (such as ibuprofen, Advil®, Motrin®, naproxen, or Aleve®), vitamin supplements, or herbal medications for at least two weeks because they can increase your risk of bleeding after surgery. Your pain will be significant for at least the first 7-10 days following surgery, but it should improve markedly by 14 days following surgery.

**Nutrition and fluids**
It is very important to have good nutrition and avoid dehydration after surgery. Due to the pain and swelling that is expected after surgery, you will most likely only be able to tolerate a liquid diet for the first 4-5 days after surgery. Push yourself to drink fluids, even if it is painful. The first sign of dehydration is a decrease in urination, so keep track of this. In addition to water, it is helpful to drink other liquids, such as juices or Gatorade®. It is also essential that your body receive protein and fat in your diet to help with healing and maintaining your energy level. Every day, you should have 3 glasses of something with fat and protein like milk or chocolate milk, nutritional supplements like Muscle Milk® or Ensure®, or protein shakes. Dr. Fletcher may order a nutritional supplement like this while you are in the hospital. As your recovery continues, you will transition to soft solid foods such as eggs, yogurt, or mashed potatoes. You should be able to tolerate a fairly normal diet by 2 weeks after surgery. During the recovery period, you should avoid foods with sharp edges such as chips because these can cause bleeding. Otherwise, you can advance your diet according to your own schedule, being careful not to cause too much pain. Dr. Fletcher wants his patients to maintain their nutrition so that they do not lose weight in the few weeks right after surgery.

**Antibiotics**
Most patients receive an antibiotic while in the hospital. You may be prescribed an antibiotic to take when you go home. This can be useful for preventing infection and decreasing swelling. Take the antibiotics as directed. If you develop a rash or diarrhea (possible risks of antibiotics and other medications), stop the antibiotics and contact Dr. Fletcher immediately.

**Activity**
Walking after surgery is important. Patients should walk at least 3 times a day starting the day after surgery. Walking helps prevent blood clots from forming in your legs. Spending more time out of bed (walking or in a chair) than in bed is helpful because your lungs fill up with air,
lowering the risk of fevers and pneumonia. Not walking enough is a major cause of fevers after surgery, so please do remember to walk at least 3 times every day. Patients should avoid strenuous activity for 4 weeks following surgery because that typically raises heart rate and blood pressure. For this reason, it can increase swelling or cause bleeding to start.

Do not use mouthwashes, lozenges, or throat sprays
Patients should not use mouthwashes, lozenges, or throat sprays following surgery because many of these contain alcohol that can irritate the lining of the mouth or numbing medication that can expose you to a serious complication when used for more than a couple of times.

Ear problems or jaw discomfort
The swelling in your throat that occurs after surgery can cause jaw pain or ear symptoms such as pain, pressure, or fullness. This is common and should improve within 1-2 weeks following surgery. It occurs because the soft palate and tonsils are next to the jaw and the small Eustachian tube that connects the space behind the eardrum to the top of the throat. Swelling in the throat can interfere with your ability to clear or pop your ears, and it can also be sensed by your body as pain coming from your ears even though the ears are not affected (a phenomenon called referred pain).

Sleep with head elevated (at 45 degrees) for at least three days
Elevating your head during sleep decreases blood flow to the head and neck regions. Therefore, it decreases swelling and the associated pain. Elevating the head during sleep may also improve breathing patterns in other ways. Therefore, we recommend elevating your head during sleep at 45 degrees for at least three days following the procedure.

Nausea and constipation
Nausea and constipation are very common after any surgery. The anesthetic medications that you receive during surgery and the narcotic pain medication you receive after surgery can cause these. You will receive medications after surgery to decrease nausea and constipation, but please notify Dr. Fletcher if you feel constipated or have not had a bowel movement in any 3 days after surgery.

Postoperative appointment
Dr. Fletcher likes to see his patients 1 week after hyoid suspension. If a postoperative appointment has not been scheduled, please contact the office at 678.902.9495 to schedule this when you return home after your surgery.

Additional questions
Please call our surgical coordinator, Ashley at 678.902.9495 with any questions during normal business hours.