LARYNGEAL LASER SURGERY UNDER LOCAL ANESTHESIA

For adults with certain growths on the voice box (larynx), office-based surgery can be a good alternative to traditional surgery in the operating room and avoids the need for general anesthesia. First, the patient’s nose and throat are thoroughly numbed by Drs. Halum or Parker. Next, a thin, flexible scope is passed along the floor of the nose and into position to allow visualization of the vocal folds (part of the voice box). The scope allows advancement of a grasper (for biopsy) or a laser fiber to diagnosis and/or treat growths within the voice box.

Are you a good candidate for having laryngeal laser surgery under local anesthesia?
If you tolerate your throat being examined with flexible scopes through the nasal cavity without excessive anxiety, do not have a severe cough/gag reflex, and tolerate local anesthesia, you are likely a good candidate for having the this technique to diagnose and/or treat your voice box problem.

What are the advantages of having the procedure done under local anesthesia?
The main advantage is avoiding the risks and recovery related to general anesthesia. Because no general anesthesia or sedation is required, the procedure takes much less time, usually about the same time as a routine clinic visit. Recovery is also extremely quick, allowing you to return to work or other normal daily activities immediately. A patient can drive him/herself to the appointment rather than having to arrange for transportation, as is required with traditional outpatient surgery. The laser that is typically used (the KTP laser) acts on the blood supply to the abnormal tissue and spares the surrounding normal tissue when used properly. Finally, it costs the patient/third party payer dramatically less to have the procedure done in clinic when compared to the operating room. (Dr. Halum published a study that showed the cost of laser surgery in clinic was less than one-third the cost of having traditional outpatient surgery.)

What are the disadvantages of having the procedure done under local anesthesia?
The main disadvantage is that the procedure is done with topical numbing medicine alone, so there is some discomfort involved at the level of the throat during the procedure. Also, because the laser acts on the blood supply to the voice box growth(s), the treated growth(s) shrink over the course of about 6 weeks. Thus, the maximum improvement in voice is not achieved until that time, and often there is some degree of hoarseness before that improvement occurs. Occasionally the procedure needs to be repeated if a growth does not go away completely with the initial treatment. With certain diseases that are known to recur over and over again, such as recurrent respiratory papillomatosis (RRP) or recurrent leukoplakia of the vocal folds, sometimes by the time laser-treated growths have shrunk away, there are already new growths. However, with those diseases, the same problem with rapid recurrences also happens after traditional surgery in the operating room.
What are examples of growths that are commonly managed in clinic?

![Laryngeal Granulomas](image1)
![Recurrent Respiratory Papillomatosis](image2)
![Vocal Fold Leukoplakia](image3)

If I plan to have laryngeal laser surgery done under local, how should I prepare?
Unlike the operating room procedure, you do not need to be strictly NPO after midnight, although we ask that you avoid eating anything 2 hours before the procedures. Some patients choose to avoid eating until after based on their own comfort.

What will the procedure involve?
You will come into clinic, just as if you are having a clinic appointment. Just prior to having the procedure, the nursing staff or doctor will spray your nose with decongestant/numbing medication, and pledgets coated with numbing medication will be inserted into your nose. You may have some additional mediation sprayed through your mouth to numb your throat. After the pledgets in your nose are are removed, a small flexible scope is passed along the base of the nose into the upper portion of your throat. The vocal folds are numbed with additional topical numbing solution, and then the growth(s) are biopsied and/or lasered through the scope. Occasionally local anesthesia will also be injected into your neck for additional numbing effect.

What can I expect after the procedure?

YOU WILL BE VERY HOARSE AFTER THE PROCEDURE. Often the hoarseness is immediate and can be very severe the first few days after the procedure. While strict voice rest is not necessary, excessive voice use during this period will make the hoarseness last longer and be more severe. Typically the voice gradually improves, but some hoarseness for several weeks after the procedure (during the initial healing process) is not uncommon.

Medications: You can resume all of your normal medications after the procedure. Over the counter pain medications such as Tylenol (650 mg by mouth as needed every 6 hours) or ibuprofen (600 mg by mouth as needed every 6 hours with food) is usually enough to control the discomfort. If a very aggressive procedure was done, sometimes prescription pain medications or other medications may be prescribed.

Diet: The numbing medication typically wears off within 90 minutes after the procedure has been completed, so we recommend waiting 90 minutes before you eat or drink anything. At that point, your comfort levels should determine what you eat and drink. Most patients take in soft foods or a liquid diet the first 24-48 hours and then advance to a normal diet as tolerated. However, it will not cause any problems if you feel ready to resume your normal diet sooner (immediately).

Follow-up: Your follow-up appointment can be scheduled before you leave the office on the day of your treatment. Depending on the treatment involved, this is usually scheduled 6-8 weeks after the procedure.
some cases of chronic, recurrent diseases (such as recurrent respiratory papillamotosis) we do not schedule routine follow-up appointments, but simply schedule the next laser treatment within a timeline individualized to the patient’s disease status.

**Reasons to Call our Office After Your Procedure:**

- Throat pain lasting more than one week after the procedure
- Fever and productive cough within the first week after the procedure
- Hoarseness lasting for more than eight weeks after the procedure
- Any other questions or concerns