

Microlaryngoscopy with biopsy is a procedure that observes the vocal folds in great detail with magnification and takes a sample of the tissue in the larynx. The magnification may be with a microscope, endoscope or by video enlargement. It is often accompanied by some additional procedure such as removal of a mass, swelling or tumor. Long delicate instruments or a laser may be utilized. It is sometimes performed in the office, though more typically it is performed in the operating room.

Anesthesia

When microlaryngoscopy is performed in the operating room, it is usually done with the patient asleep. You may hear by phone from your anesthesiologist the night before or you may meet him/her the morning of surgery. You should tell them of any problems you have had in the past or any concerns you have about having anesthesia. In particular, if you have had trouble with nausea or vomiting in the past, your anesthesiologist may be able to adjust your medications to decrease the chance of stomach acid irritating your vocal folds as it comes back up.

The operating room

The operating room table is often pre-chilled (I warned you). You will be put to sleep with medicine through a vein and may have a mask on to breathe some oxygen while falling asleep. After you are asleep, your head is tipped quite far back. The surgeon sits at the head of the table, essentially above your head. An instrument called a laryngoscope is inserted through your mouth so the surgeon can down your throat past the back of your mouth. The laryngoscope is a hollow metal tube that when placed in the proper position allows a direct view of your voice box. It pushes the teeth and the tongue out of the way. To protect your teeth from chipping, a rubber or plastic tooth guard is placed over your upper teeth. Your neck is extended so that the surgeon has a view straight down your throat from above. It is a bit like sword swallowing. Your eyes are closed and padded for protection. If the laser is used, wet towels are placed over and cover your face completely to absorb the laser beam if inadvertently fired. The surgery is delicate and a bit tedious but not difficult. It may take about an hour to perform a typical surgery, though this varies a lot. Many types of procedures can be performed during a microlaryngoscopy. Some typical procedures ([Bastian](#)) would include using long (about 12 inches) delicate forceps to grasp and hold a nodule. Then microscissors are used to remove the bump. Sometimes fluid is injected into the vocal fold to push a surface bump away from the underlying structures before it is cut. The laser may be used to vaporize an unwanted blood vessel. A tumor may be cut out with the laser. Scar tissue may be cut with a knife, fat may be implanted, the incision in the vocal fold may be left open, and in uncommon cases, it may be sewn shut. A biopsy or small sample may be taken to find out what disease is present. I cannot personally think of an occasion to strip a vocal fold. Use [caution](#), if you hear that term. That procedure can cause more harm than good.

Instructions during healing

These are my particular inclinations and I vary them depending on what I am doing on the voice box and what the vocal needs are of the patient. Expect a wide variation in recommendations from myself as well as others.

- First week
 - Feel free to drink plenty of fluids to keep secretions thin. I suggest that you rest your voice for 1 - 7 days depending on what lesion was removed. This means essentially no talking. My belief is that the raw edges of tissue need an initial chance to heal. You know that if you pick at a cut on your skin, it will keep bleeding and make for an uglier scar, likewise the vocal folds. If you have reflux, be sure to take your antireflux medication in the coming days to aid in healing without inflammation. I suggest that during these days you sigh gently about 6 times a day for a minute to get some gentle vibrations massaging the vocal folds. Then, as the edges of the cuts are stuck down, you may begin talking. Some of my patients sneak in a few words, as they can't resist the desire to talk. While I don't recommend talking, here is what you might experience. On the afternoon of the surgery, your voice will be pretty good, usually better than before surgery. Then, swelling sets in since your vocal folds are bruised and your voice will sound deep, rough and laryngitis-like. It will require a little extra effort to talk.
- After several days
 - You may begin talking, though I would like you to pretend that you do not like to talk and keep it to a minimum for the first weeks. Talk perhaps 10% of your normal amount. Pretend that you are a 1 on the [7 point scale of talkativeness](#). Ask your close friends and family if you are behaving like a 1. Their answer will likely surprise you. If you sing, you may do 5 minutes of easy warm up per day. I will see you back sometime the week after surgery. I expect to see some swelling and bruising but would like to monitor your healing phase. Your voice will sound like you have laryngitis from the swelling. This improves quickly at first, then more slowly.
- After 7 days
 - Now begin using your voice about 25% of your normal quantity of speaking. Pretend you are a 2 on the [7 point scale of talkativeness](#). You may sing 10 minutes a day.
- After 2 weeks
 - You are getting there. Talk about 50% of normal, sing, but not at a performance level. I have had people sing a performance this early, but I am nearly certain they do not get as good a surgical result. If you talk all day, you could vibrate your vocal folds one or two million times. That is asking a lot from a healing incision. Be patient. Your voice should continue to improve. If you are a singer, you should gradually be reaching some higher notes with greater ease. Pretend you are a 4 on the [7 point scale of talkativeness](#).
- After three weeks
 - I will see you back again. If everything is healed, go up to about 75% of normal. Otherwise, it will be healed soon. If you saw a speech therapist before surgery, it would be a good idea for a follow up visit to confirm that you are doing the appropriate behaviors. When your physician feels you are ready and that will often be about 4 weeks after surgery, resume your

- singing. I would consider the [warmup recommendations](#) of one of the country's most outstanding vocal scientists, Ingo Titze. You might have your therapist interpret some of his suggestions if you are unfamiliar with any of the terms.
- Six weeks
 - Return for a follow up visit to see if you are healed. If I operated on you for a lesion that was caused by talking often (you are a 6 or 7 in terms of the talkativeness scale), remember, I have not operated on your brain. It is up to you to give your voice the chance to rest that it needs. Being innately talkative is a wonderful personality, but can be vocally expensive. If you are a singer, you should be performing the swelling tests to monitor your vocal folds. Follow up recommendations vary a lot depending on my judgement about the underlying problem and its likelihood of recurrence.
- Six months
 - Mid term evaluation
- One year
 - Long term evaluation of your surgery.