Laryngoscopy/Biopsy

The larynx is the medical term for voice box. Laryngoscopy refers to an examination of the voice box and nearby throat which may be performed in several ways:

- **Indirect laryngoscopy** is done in the office with a mirror much like your dentist uses. It is often part of the routine exam.
- **Fiber optic laryngoscopy** is also done in the office but uses a small flexible scope placed through the nose, or a rigid one through the mouth, to examine and sometimes videotape the larynx. A mild anesthetic sprayed into the nose or back of throat may be used.
- **Direct laryngoscopy** is a surgical procedure in which a tube-like instrument is passed through the mouth to examine the back of the throat, voice box, or entrance to the esophagus (swallowing tube). This procedure is done in the operating room.
- **Micro-laryngoscopy** is basically the same technique as direct laryngoscopy but an operating microscope is used to magnify structures within the voice box.

A biopsy is a small piece of tissue taken from the body to be sent to a pathologist for diagnosis. There are many different types of biopsies. Nearly all of them involve using a sharp tool to remove a small amount of tissue.

**Types of Biopsies**

- **Needle biopsy.** Most biopsies are needle biopsies, meaning a needle is used to access the suspicious tissue.
- **CT-guided biopsy.** A person rests in a CT scanner; the scanner’s images help doctors determine the exact position of the needle in the targeted tissue.
- **Ultrasound-guided biopsy.** An ultrasound scanner helps a doctor direct the needle into the lesion.
- **Aspiration biopsy.** A needle withdraws material out of a mass. This simple procedure is also called a fine-needle aspiration (FNA).
- **Surgical biopsy.** Either open or laparoscopic surgery may be necessary to obtain a biopsy of hard-to-reach tissue. Either a piece of tissue or the whole lump of tissue may be removed.
- **Incisional biopsy** is a procedure in which a small area of tissue is taken to identify the composition (or makeup) of a lesion, mass, or abnormality.
- **Excisional biopsy** is a more involved procedure in which the entire abnormality or area of concern is removed.

**Why are Laryngoscopy and/or Biopsy performed?**

Common reasons for a laryngoscopy include voice difficulties due to polyps, nodules, or abnormal tissues on the vocal cords. Breathing or swallowing difficulties may require an exam of the voice box.
Those who have abnormal looking tissue that might be a tumor or cancer need a biopsy performed. A paralyzed vocal cord may also be injected during the laryngoscopy.

**What type of anesthesia is used?**
Direct laryngoscopy, micro-laryngoscopy, excisional and surgical biopsies are done in a hospital or outpatient facility operating room. Usually, patients are completely asleep under general anesthesia. Local anesthetic may be used for injection of paralyzed vocal cords or when health problems require it. A minimally invasive biopsy (for example, most skin biopsies) may be done in the doctor’s office, and a small injection of numbing medicine is given.

**How long am I in the hospital?**
In most cases, a laryngoscopy and biopsy are done on an outpatient basis.

**What complications may occur?**
Many are concerned about anesthesia, but complications are quite uncommon, particularly when the patient is otherwise healthy. An anesthesiologist (MD specializing in administration of anesthetics) is involved in all cases and is responsible for this aspect of your care. If you need to discuss this further, arrangements can be made to meet with an anesthesiologist preoperatively. Other complications that may occur include: damage to the upper teeth and, extremely rarely, difficulty breathing. It is common for the patient to have a coughing sensation and even produce a small amount of blood, especially if a biopsy was taken. If the procedure was done for voice improvement, this may take some time to occur and may not be as complete as expected.

**Things to know following the procedure**
- Following surgery it will be important for you to carefully follow the instructions you will be given. Postoperative visits are often nearly as important to your best possible healing as the surgery itself. Routine post-operative visits are part of the surgical fee.
- Most patients return to school or work shortly after the procedure, although this may be delayed if excessive voice usage or breathing of dusty or dirty air would occur.
- If a pathology specimen or other test was performed during the procedure, call our office for results if you have not been contacted by us within 5-7 working days afterward.