

Laryngoscopy

Thyroid cancer sometimes presents with changes in voice; additionally, the hazards of surgery include damage to the recurrent laryngeal nerve or other insults that result in voice alterations. Laryngoscopy should be used to evaluate the vocal cords and airway prior to and following surgery. This is important in evaluating the extent of the disease's invasiveness, as well as in determining whether the patient has vocal cord paralysis pre-operatively, another indication of the extent of disease and one that can change the management of the patient. Patients with vocal cord paralysis may present without voice changes.

In direct or rigid laryngoscopy, also used to in endotracheal intubation, the laryngoscope, which includes a blade and a light source, is inserted into the mouth.

Indirect laryngoscopy involves a mirror, placed in the back of the patient's throat, and a bright light, usually a headlamp the physician wears. In fiber-optic (also known as direct flexible) laryngoscopy, the physician passes the fiber-optic scope through the patient's nose in order to visualize the vocal cords. While direct laryngoscopy must be done under general anesthesia, indirect and fiber-optic laryngoscopy may be achieved in the physician's office, using a local anesthetic.

References:

Randolph GW, Kamani D. The importance of preoperative laryngoscopy in patients undergoing thyroidectomy: voice, vocal cord function, and the preoperative detection of invasive thyroid malignancy. *Surgery*. 2006 Mar;139(3):357-62.