

Vocal fold surgery

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Vocal fold surgery is indicated in the following scenario:

1. Vocal nodule
2. Vocal cord cyst
3. Vocal cord polyp
4. To biopsy a suspicious lesion from vocal fold

Anesthesia:

In this surgery the anesthetist and the surgeon will have to share the airway. This surgery is performed under general anesthesia. Micro laryngeal endotracheal tube is used for the purpose of intubation. This tube has a cuff that will inflate in to a round shape when inflated. This ensures that the surgeon has an unimpeded vision of both the vocal cords. If this endotracheal tube is not available, then a small sized tube is used.

Position:

The patient is placed in supine position. Neck is extended by placing a small sandbag behind the shoulder blade of the patient. The head is slightly flexed by the surgeon before insertion of the suspension laryngoscope. The suspension laryngoscope is inserted through the oral cavity. It should be placed in the middle of the oral cavity to get a symmetrical view of vocal folds. The tip of the laryngoscope is placed just below the epiglottis so that the anterior commissure of the vocal folds is visible clearly to the surgeon. The laryngoscope is fixed to the chest of the patient using a chest piece.

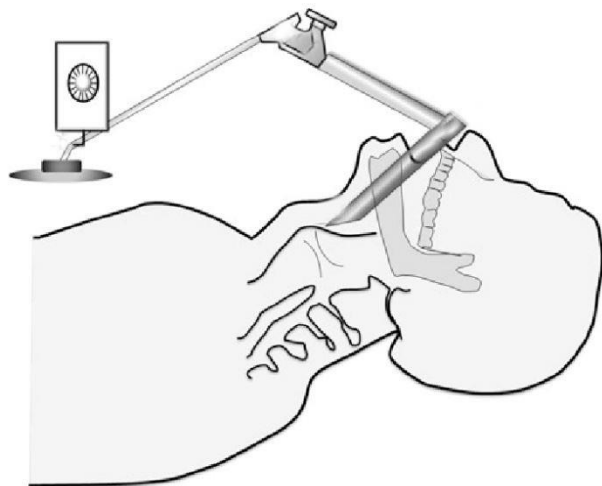
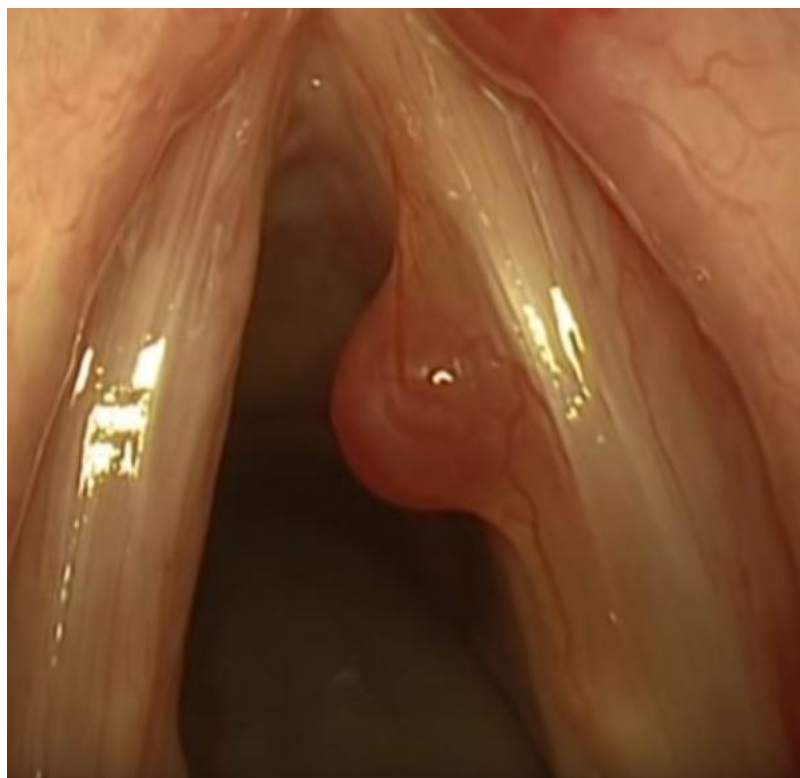


Diagram showing a suspension laryngoscope



View of the cyst in the vocal cord

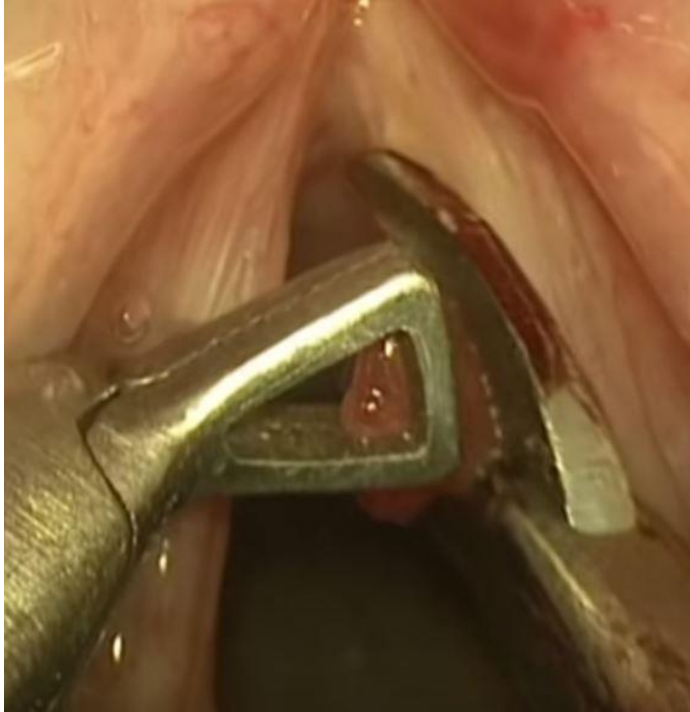
The surgeon is seated at the head end of the patient. If the surgeon prefers to use microscope to visualize vocal folds then the objective lens of 400 is chosen. Currently laryngoscopes are available which has rigid endoscope ports through which 12-degree rigid endoscope can be

inserted. A camera can be attached to the endoscope to make the images visible in the monitor. The surgeon can perform the surgery by seeing the monitor.



Micro laryngeal bucket forceps seen being used to hold the vocal nodule

A micro laryngeal bucket forceps can be used to hold the cyst / polyp arising from the vocal cord. A micro laryngeal scissors can be used to remove the polyp / cyst.



Micro laryngeal scissors seen being used



Image showing the vocal cord after removal of the nodule

Micro flap technique:

This is ideally used to remove cysts involving the vocal folds. In this procedure, an incision is made along the superior surface of the lesion near the interface of the normal and abnormal tissues. Dissection is performed in separate planes to isolate the lesion. The diseased tissue is

removed, the spared epithelium is trimmed and laid back over the defect to optimally oppose the epithelial layers. This limits scar tissue formation.