



Can you speak about 'Larynx' disorders?

Larynx, commonly known as voice box, is the structure from where the voice is produced and is situated in the front of the neck. There are many conditions that can affect the larynx.

Structure of Larynx

Larynx consists of vocal cords which move and vibrate leading to production of voice. Vocal cords have two functions- a) it closes when we swallow the food thereby prevents the entry of food into the windpipe, and b) production of voice. The food passage is situated behind the larynx.

What happens when Larynx is affected?

When there is disruption in the function of the larynx, the patient either exhibits change in the quality of voice qualities or aspiration of food into the air passage. Change in the quality of voice, what we call hoarse voice / rough voice / breathy voice /whispering voice etc. can be due to vocal abuse that is improper usage of voice or may be due to disease of vocal cords or surrounding structures. We have to analyze whether it is due to improper usage or due to disease and the management varies according to the reason. Vocal abuse causes disrupted voice and includes excessive voice usage, shouting, screaming, talking in noisy environments where we use more volume to make others hear, leading to some changes in the vocal cords which are the organs of voice generation.

Larynx Disorders

Some disorders that can be caused due to a problem with the larynx are as follows:

Vocal cord nodules: Small swelling appears on the free edge of the vocal cords. They are common in children where we call them screamers nodule, in teachers has teachers' nodule or in singers as singers' nodules.

Vocal cord polyp: They also arise on the free edge of vocal cords as a result of bleeding occurring under the layer of the vocal cord.

Glottic gap: occurs due to improper closure of vocal cord leading to escape of airflow between the vocal cords.

Muscle tension dysphonia: is the conditions where the muscle structures above the vocal folds come in the way or obstructs the flow of voice energy towards our mouth.

GERD or gastro-oesophageal reflux disorder: is a condition which is commonly called gastritis or gastric problems where the reflux of acid from the stomach burns the vocal cord near the food tract which can be controlled by medicines and following some diets and modifying habits.

Functional aphonia: is a condition in which the patient is psychologically weakened due to some circumstances and is unable to produce the voice. Here the vocal cord movements are forcefully controlled by the patients to create sympathy between their relatives. This condition needs psychological counselling and therapy.

Puberphonia: It is the condition which occurs in adolescent males when the voice has to change from childhood voice to adult male voice, here also the condition can be cured by using suitable counselling and voice therapy.

Sulcus vocalis and other congenital disorders: It is a condition of present in the some of the vocal cords where the vocal cord as a linear furrow along its length and the vocal cord approximation is not complete and a glottic gap will be present which can be treated surgically by filling the furrow and making cord bulkier and along with voice therapy.

Laryngomalacia: is a condition where the laryngeal cartilages are not fully matured and the layers over these cartilages are fleshy and cause noise during respiration.

Cysts: are fluid filled dilatations that occur above the vocal cord causing hoarse voice. Laryngocoele: is a condition that occurs in trumpet / glass blowers where a sac filled with air develops above the vocal cord or in the neck.

Hemangiomas: are swelling that can cause voice change and respiratory difficulty. Most of these congenital anomalies can be cured by surgical methods.

Laryngitis: is the inflammation of larynx either due to infection by bacteria, virus, or fungus which can cause temporary change in voice which can be cured by medicines. Chronic variety of laryngitis has to be evaluated by doing a biopsy of the tissue of the vocal cord.

Reinkes Oedema: is a condition that occurs in smokers where the vocal cords become bulky due to accumulation of gelatinous like material below the epithelial layer. This can be cured by surgery vocal hygiene methods.

Vocal Cord Paralysis: can cause disrupted voice. The vocal cords do not move during voice production. If the vocal cords are away from each other there will be a whispering type of voice and if they are closed the subject will experience difficulty in respiration. There are several causes for vocal cord paralysis from the level of involvement of nerves from the skull base up to the chest.

AIISH is your voice

At AIISH, treatment options vary depending on the conditions that affect the larynx. If your condition has been caused by vocal abuse, misuse or overuse, the treatment might be as simple as resting your voice for a small period of time. AIISH might also suggest voice or singing therapy to help you fully recover. This therapy is typically done by our speech-language pathologist.

In some cases, you might need more than rest to treat your condition. If you've been diagnosed with laryngeal cancer, for example, treatment options could include, surgery, radiation therapy, and chemotherapy. Your treatment plan might involve a combination of these therapies.

At AIISH, the healthcare provider will take all of factors into account like medical condition, age and profession, when creating your personal treatment plan. Having an open conversation with your provider will help in the process of treating your condition.

Conclusion

Most conditions that affect the larynx are treatable if one reaches out to a healthcare provider when first notice symptoms. It's important to contact a healthcare provider when an individual is experiencing anything unusual because some conditions can cause permanent damage to the larynx and voice.

- Dr. T.K. Prakash

Associate Professor, ENT Department
All India Institute of Speech & Hearing
Mysuru - 570 006, Karnataka