

University of Al-Mustaqbal College of Science Department of Medical Physics



Phonetics

Second stage

Causes of sudden hoarseness of voice

Lectures nine and ten

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"Causes of sudden hoarseness of voice"



Hoarseness is an abnormal change in the voice, where the voice alters in strength and pitch, becoming hoarse and not clearly audible.

Causes of sudden hoarseness

Hoarseness is caused by any external or internal factor affecting the vocal cords located in the larynx. Here are the main causes of sudden hoarseness:

1. Common Cold

The common cold is the most common cause of sudden hoarseness. Viral colds can lead to inflammation and swelling of the throat, which may affect the vocal cords and cause them to swell, resulting in hoarseness. Treatment is usually self-managed; you simply need to rest your voice and drink plenty of fluids.

2. Overuse of the Voice

Excessive use and strain of the voice is another cause of sudden hoarseness. Talking, singing, or coughing for extended periods can tire and strain the vocal cords, leading to hoarseness.

3. Smoking

Smoking significantly increases the risk of hoarseness compared to non-smokers. This is due to the smoke irritating and inflaming the vocal cords.

Additionally, smoking raises the risk of developing benign growths on the vocal cords, which can further affect the voice.

4.Laryngitis

Laryngitis is a common cause of sudden hoarseness. It can be caused by viruses, fungi, inhalation of harmful substances that irritate the larynx, the use of certain medicinal sprays, or problems related to the immune system.

5. Abnormal Growths on the Vocal Cords

Any abnormal growth on the vocal cords can lead to sudden hoarseness. These growths can take several forms, including:

- **Nodules:** Small, benign tissue nodules that appear due to prolonged voice strain.
- **Polyps or Benign Tumors:** These may also develop as a result of voice overuse.
- Cysts filled with mucus or Papillomas: These are non-cancerous tumors caused by certain types of viruses.

6. Gastroesophageal Reflux (GERD)

Gastroesophageal reflux disease (GERD) may be a cause of bad breath. Acid reflux can reach the vocal cords and negatively impact the voice, leading to hoarseness and a worse voice in the early morning.

Vocal symptoms caused by GERD are accompanied by other chronic symptoms, such as attacks of sore throat, congestion, and congestion.

7. Certain nervous system diseases

Some neurological diseases negatively impact the vocal cords by disrupting the nerves supplying the larynx and vocal cords. These diseases include stroke, Parkinson's disease, and multiple sclerosis.

8. Cancer

Sudden, chronic hoarseness may be a sign of laryngeal cancer. Symptoms of laryngeal cancer, in addition to hoarseness, include pain when swallowing, earache, difficulty breathing, and neck swelling. Some cancers, such as breast cancer or lung cancer, can put pressure on the nerves supplying the larynx, thus causing sudden hoarseness.

9. Other Causes of Sudden Hoarseness

Some of the most important other causes of sudden hoarseness include the following:

- Seasonal allergies.
- Rheumatic disease.
- Thyroid gland disorders.
- Prolonged use of steroid inhalers.
- Injury or trauma to the vocal cords caused by the use of tubes during surgeries and endoscopy.
- Spasmodic dysphonia, which is a disorder affecting the muscles of the larynx.
- Vocal nerve paralysis, which sometimes occurs after surgical operations.

"Prevention of Sudden Hoarseness"

Sudden hoarseness can be alleviated by following some tips, including:

- Avoid smoking or sitting with smokers.
- Drink plenty of water.
- Avoid alcohol and spicy foods.
- Avoid straining your voice and give your vocal cords rest.
- Reduce caffeine intake.
- Make sure to wash and clean your hands daily.
- Avoid exposure to irritating chemicals.
- Try to avoid foods that cause indigestion and acid reflux.

Vocal Cord Inflammation:

Have you ever noticed your voice starting to fade? Did you know that this change in your voice could be one of the symptoms of vocal cord inflammation? So, what exactly is this inflammation, and what are its causes?



Vocal cord inflammation may be acute, lasting no more than 3 weeks, or chronic, lasting longer than 3 weeks. We will learn more about vocal cord inflammation.

Reasons

Inflammation of the vocal cords can result from several factors, including:

Infections: Various infections, such as viral and bacterial infections, can cause acute laryngitis.

Vocal cord strain: Yelling or talking for long hours may strain the vocal cords, leading to acute inflammation.

Allergies: Exposure to allergens like smoke can cause chronic inflammation of the vocal cords.

Certain diseases: Some conditions, such as acid reflux or chronic sinusitis, may cause chronic inflammation of the vocal cords.

Vocal cord inflammation: Symptoms

Symptoms of vocal cord inflammation often appear suddenly and worsen within three days. Symptoms of vocal cord inflammation include:

- Sore or itchy throat.
- Hoarseness or loss of voice.
- Fever.
- Dry cough.
- Swollen lymph nodes.

There are several methods used to diagnose inflammation in the vocal cords, and among these methods we mention:

1. Swab

The doctor examines the throat and takes a swab from the throat tissues to be tested in the laboratory. The swab test helps confirm the diagnosis of vocal cord inflammation caused by viral or bacterial infection by culturing the swab and waiting for any growth to appear.

2. Laryngoscopy

Laryngoscopy involves using a special laryngoscope, which is a tube with a camera at the tip. It is inserted through the nose or mouth to magnify the vocal cords, making it easier to examine and look for signs of redness, swelling, or irritation of the vocal cords.

3. Biopsy

A biopsy is sometimes performed if any suspicious signs appear during the laryngoscopy. The doctor takes a tissue sample from the vocal cords to be examined under a microscope.

Vocal Cord Inflammation: Treatment

There are various methods to treat vocal cord inflammation, including home remedies and medical treatments, as follows:

1. Home Treatment Methods for Vocal Cord Inflammation

There are many specific tips for treating vocal cord inflammation at home, including the following:

- Drink plenty of fluids, especially water, and avoid caffeinated beverages.
- Gargle with a saline solution to reduce pain and swelling associated with inflammation.
- Sucking on medicated tablets containing eucalyptus or mint extracts.
- Avoid using decongestants, as they increase throat dryness.
 - 2. Medical Treatments for Vocal Cord Inflammation

There are several medical methods used to treat vocal cord inflammation, such as:

Antibiotics: Some antibiotics, such as Erythromycin, are used to treat bacterial inflammation.

Painkillers: Various painkillers are used to relieve pain associated with inflammation, including Paracetamol and Ibuprofen.

Corticosteroids: Corticosteroids are used to reduce the severity of symptoms and treat inflammation.

Voice therapy: Voice therapy is a type of speech treatment that helps maintain the voice and prevent its loss.

Vocal Cord Inflammation: Complications

There are some complications that may result from not properly treating vocal cord inflammation, such as:

Respiratory distress syndrome.
Epiglottitis.
Sepsis.
Sepsis.

☐ Pneumonia.

Causes of Hoarseness and Treatment Methods

What are the causes of hoarseness? What treatment options are available? Are there preventive measures?.



Hoarseness of voice can be caused by many factors and causes. Hoarseness of voice does not develop into a disease in itself:

Causes of Hoarseness

Hoarseness is not considered a disease but rather a symptom indicating problems with the vocal cords. The voice may sound rough, accompanied by audible breathing sounds, or it may become quieter and less sharp.

Here are the main causes of hoarseness:

1. Laryngitis

Laryngitis is one of the main causes of hoarseness, occurring due to temporary swelling of the vocal cords caused by colds or upper respiratory infections.

2. Misuse or Overuse of the Voice

There are several practices in which a person may misuse their voice, but some groups are forced to use their voice continuously, such as teachers, singers, or public speakers.

Here are some incorrect voice habits, such as:

- Speaking loudly in noisy environments, or speaking too softly.
- Talking for long periods without resting the voice.
- Singing at very high volumes.

3. Gastroesophageal Reflux Disease (GERD)

Gastroesophageal reflux disease, or acid reflux, causes hoarseness due to stomach acids rising to the throat and, in some cases, reaching the larynx. This irritates the tissues and vocal cords. The condition often worsens in the morning and improves throughout the day.

4. Vocal cord nodules and tumors

Vocal nodules and polyps appear along the vocal cords. Vocal cord nodules grow on opposite sides of the vocal cords, causing pressure and friction, and vocal sac tissue grows inside the vocal cords.

5. Vocal Fold Hemorrhage

One cause of hoarseness is bleeding that occurs when a blood vessel on the surface of the vocal folds ruptures, causing a sudden onset of hoarseness.

6. Vocal Cord Paralysis

This occurs when one or both vocal cords are unable to open properly. It can result from several causes, such as:

- Injury to the head, chest, or neck.
- Tumors at the base of the skull, neck, or chest.
- Lung cancer or thyroid cancer.

7. Neurological Disorders

Certain neurological problems affect specific parts of the brain that control the throat and laryngeal muscles. The most common of these include:

- Stroke
- Parkinson's disease
- Spasmodic dysphonia

8. Other Causes

Other causes of hoarseness include:

- Aging
- Smoking
- Thyroid problems
- Trauma to the vocal cords due to injury or the use of a feeding tube in

certain medical conditions.

Treatment of Hoarseness

After identifying the causes of hoarseness, the treatment depends on the underlying reason, as follows:

1. Treatment of Laryngitis

The treatment depends on the underlying cause, whether it's a cold or an upper respiratory infection. The doctor may recommend the following:

- Getting plenty of rest
- Drinking adequate amounts of fluids
- Taking over-the-counter pain relievers
- Using over-the-counter allergy medications
- Using cough suppressants and a humidifier to moisten the airways as additional supportive measures
- Antibiotics are generally not recommended

2. Treatment of Improper Voice Use

Certain measures can help, such as:

- Reducing voice use whenever possible
- Drinking plenty of water to keep the vocal cords hydrated
- Visiting a speech-language pathologist, who can provide vocal exercises and other tips to help prevent the problem.

3. Treatment of Gastroesophageal Reflux Disease (GERD)

Exposure to stomach acid can be reduced by making dietary changes and taking medications that decrease stomach acid production.

4. Treatment of Vocal Cord Nodules and Tumors

Treatment options include voice rest, surgery, and voice therapy.

5. Treatment of Vocal Fold Hemorrhage

Immediate medical intervention is required, and the patient should rest their voice completely.

6. Treatment of Vocal Cord Paralysis

Voice therapy is commonly used, and in some cases, surgery may be necessary.

7. Treatment of Neurological Disorders

Treatment depends on the underlying cause of the hoarseness in each individual case.