#### **Patient Information**

# **Vocal Fold Haemorrhage**

#### What is Vocal Fold Haemorrhage?

**Vocal fold haemorrhage** occurs when there is bleeding within one of the vocal folds (also known as vocal cords). This typically results from trauma or excessive strain on the vocal folds, which can cause blood vessels in the vocal fold to rupture. The bleeding leads to swelling and changes in the normal vibration of the vocal folds, affecting your voice.

Vocal fold haemorrhage can result in a sudden, dramatic change in voice quality, often leading to hoarseness or complete loss of voice. It is considered a medical emergency, as untreated haemorrhages can result in long-term voice problems.

### **Causes of Vocal Fold Haemorrhage**

Vocal fold haemorrhages are most commonly caused by situations that put sudden or excessive strain on the vocal folds. Common causes include:

- Vocal overuse or misuse: Shouting, screaming, or prolonged speaking or singing at high volumes can cause stress on the vocal folds, leading to bleeding.
- 2. **Injury or trauma**: Direct trauma to the larynx (voice box), such as a blow to the neck, or sudden, forceful coughing or sneezing can result in a haemorrhage.
- 3. **Excessive singing or speaking**: Professional singers, teachers, and public speakers who use their voices extensively are at a higher risk.
- 4. **Blood disorders**: Conditions that affect blood clotting, such as haemophilia or certain medications like blood thinners, can increase the risk of haemorrhage.
- 5. **Smoking or irritants**: Smoking, alcohol use, or exposure to environmental irritants (like pollutants) can weaken the blood vessels in the vocal folds and make them more prone to rupture.
- 6. **Gastroesophageal reflux disease (GORD)**: Chronic acid reflux can cause irritation and weaken the blood vessels in the vocal folds, making them more susceptible to injury.

## Symptoms of Vocal Fold Haemorrhage

Vocal fold haemorrhage can lead to a variety of symptoms, with the most common being a sudden change in the voice. Symptoms typically include:

- **Sudden hoarseness**: Your voice may suddenly become hoarse or weak, often after speaking, shouting, or singing loudly.
- Loss of voice: In more severe cases, you may temporarily lose your ability to speak.
- Pain or discomfort in the throat: There may be a sensation of pain, tightness, or discomfort in the throat, especially when speaking or swallowing.
- **Breathiness**: A weak or airy voice may be present due to difficulty in fully closing the vocal folds.
- **Difficulty projecting the voice**: It may be challenging to speak at a normal volume or pitch.
- **Coughing or throat clearing**: Frequent coughing or clearing of the throat may occur due to irritation from the haemorrhage.

Symptoms often appear suddenly and can be alarming, especially if they occur after intense vocal use or trauma.

## **Diagnosis of Vocal Fold Haemorrhage**

If you experience sudden hoarseness, loss of voice, or throat discomfort, it is important to consult an **ear**, **nose**, **and throat (ENT) specialist** or **laryngologist** for evaluation. The doctor will conduct a thorough examination, which may include:

- Laryngoscopy: A flexible endoscope is inserted through the nose or mouth to directly visualize the vocal folds. This allows the doctor to check for signs of haemorrhage, such as blood pooling or swelling.
- 2. **Stroboscopy**: This specialized procedure uses a strobe light to examine the vocal folds in real time, helping to assess how the vocal folds are vibrating and whether the haemorrhage is affecting their function.
- 3. **Voice assessment**: A **speech-language therapist (SLT)** may evaluate your voice to determine the impact of the haemorrhage on your vocal function and help guide the recovery process.

## **Treatment for Vocal Fold Haemorrhage**

The primary goal in treating vocal fold haemorrhage is to allow the vocal fold to heal and prevent further injury. Treatment depends on the severity of the haemorrhage, but may include:

#### 1. Voice Rest

The most important treatment for vocal fold haemorrhage is **complete voice rest**. This means refraining from talking, whispering, singing, or any vocal activity for a period of time. Voice rest is essential for allowing the blood vessels in the vocal fold to heal.

- **Avoid whispering**: Whispering can still strain the vocal folds, so it's important to avoid this as well.
- **Hydration**: Drinking plenty of fluids, especially water, is crucial to keeping your vocal folds hydrated and supporting the healing process.

### 2. Observation and Follow-Up

In mild cases, the doctor may recommend simply monitoring the condition with follow-up visits to ensure the vocal fold heals properly. Over time, the blood will be reabsorbed, and the swelling will subside. It is important to follow any voice restrictions given by your healthcare provider to avoid re-injury.

#### 3. Medications

If necessary, medications such as anti-inflammatory drugs or corticosteroids may be prescribed to reduce swelling and promote healing. However, corticosteroids are generally used cautiously in vocal fold haemorrhages and are not a first-line treatment.

#### 4. Surgical Intervention

In rare cases, surgery may be required if the haemorrhage causes significant scarring, persistent voice problems, or if the bleeding does not resolve on its own. Surgical options may include:

- **Microsurgical removal**: In cases where the haemorrhage results in a large clot or scarring, surgery may be performed to remove the clot or to repair any damaged tissue.
- **Injection of medications**: In some cases, injections may be used to help heal the vocal folds and reduce the chances of scarring.

## **Risks and Complications of Treatment**

Like any medical condition, there are risks and potential complications associated with the treatment of vocal fold haemorrhage:

- Incomplete recovery: If voice rest is not strictly followed, the haemorrhage may not heal properly, leading to persistent voice problems or long-term hoarseness.
- **Scarring**: If the haemorrhage is severe or if surgery is needed, scarring on the vocal folds can occur, which may affect voice quality.
- **Recurrent haemorrhages**: If the underlying cause of the haemorrhage (e.g., vocal strain or trauma) is not addressed, there may be a risk of recurrence.
- **Voice changes**: In some cases, even after treatment, some patients may experience lingering voice changes, such as breathiness or hoarseness.

### **Prevention of Vocal Fold Haemorrhage**

While vocal fold haemorrhage cannot always be prevented, the following steps can help reduce the risk of developing this condition:

- Use proper vocal technique: Learn how to speak or sing without straining your vocal folds. If you use your voice extensively, consider working with a voice coach or speech therapist to improve technique.
- Avoid excessive vocal strain: Limit shouting, loud speaking, and prolonged talking or singing at high volumes.
- Hydration: Keep your vocal folds well-hydrated by drinking plenty of water and consider using a humidifier to add moisture to the air.
- **Rest your voice**: Take breaks if you are using your voice heavily. Voice rest is important if you feel any strain or discomfort.
- Avoid irritants: Smoking, excessive alcohol, and exposure to environmental irritants can weaken the vocal folds and make them more susceptible to injury.
- Manage reflux: If you have gastroesophageal reflux disease (GORD), controlling your reflux can help protect your vocal folds from irritation and damage.

### **Prognosis**

The outlook for most people with vocal fold haemorrhage is positive, particularly if treated early and with strict voice rest. Many people make a full recovery with no long-term effects. However, if the haemorrhage is not treated properly or if there is excessive vocal strain after healing, there may be lasting voice changes or a risk of recurrence.

#### When to See a Doctor

If you experience any of the following symptoms, it's important to consult a doctor or ENT specialist:

- Sudden hoarseness or voice changes after shouting, singing, or intense vocal use
- Complete loss of voice after vocal strain or trauma
- Pain or discomfort in the throat while speaking or swallowing
- Breathiness or difficulty speaking at a normal volume
- Frequent throat clearing or coughing due to irritation

## **Summary**

What is Vocal Fold Haemorrhage?	Bleeding within one or both vocal folds, typically due to trauma or vocal strain
Causes	Vocal overuse, trauma, blood disorders, smoking, GERD, and environmental irritants
Symptoms	Sudden hoarseness, voice loss, throat discomfort, breathiness, and difficulty speaking
Treatment	Voice rest, observation, hydration, medications, and surgery (if necessary)
Prevention	Proper vocal technique, voice rest, hydration, avoiding irritants, and managing reflux
Prognosis	Generally good with treatment; voice rest and proper care lead to full recovery in most cases

If you have concerns about your voice or suspect a vocal fold haemorrhage, please contact your doctor or ENT specialist promptly. Early treatment and voice rest are crucial for a quick and successful recovery.