Voice changes

Self help advice from the Speech and Language Therapy service

Who is this leaflet for?

This leaflet has been written by the Speech and Language Therapy team for patients with voice issues.

Most causes for an abnormal voice are benign and not due to cancer. The information in this leaflet may help you understand more about these common causes, what you can do to help yourself, and direct you to additional help if needed.

This leaflet explains:

- how the voice is produced
- how to look after your voice.

It also covers the following common benign causes for voice change. Some or all of these may apply to you:

- laryngopharyngeal reflux
- muscle tension dysphonia
- presbyphonia.

How is the voice produced?

When we speak, air travels from the lungs and through the larynx (also known as your voicebox). The vocal cords are situated within the larynx. As the air passes between the vocal cords, they vibrate and produce the sound of your voice.

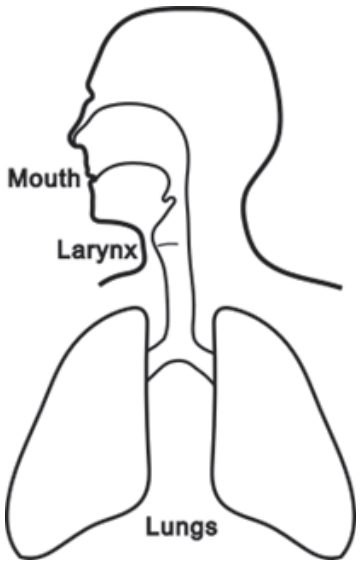


Figure 1: Side view

The following images demonstrate the normal larynx looking from above, with and without labels of the various parts:



Figure 2: The Larynx

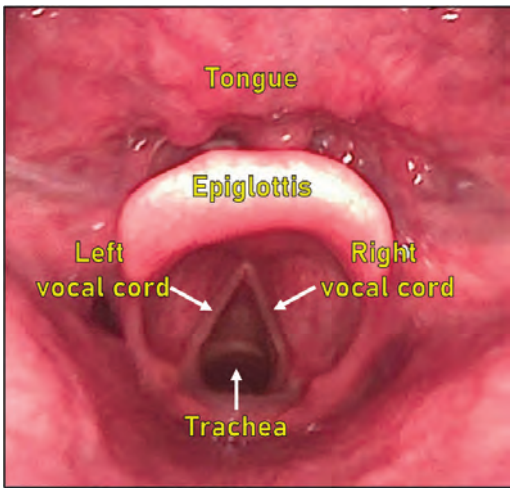


Figure 3: Labelled larynx

You can view footage of the vocal cords in action via the following link or use the QR code:

www.youtube.com/watch?v=cARrJoDDUVY

How do I look after my voice?

We advise the following:

- **steaming** – inhale steam from hot (not scalding) water through your mouth and/or nose regularly throughout the day
- **drinking lots of water** – hydrate your larynx by drinking small amounts, little and often
- **ventilation** – check the ventilation in your work and home and make sure you're in a well humidified and well-ventilated environment
- **posture** – maintaining a good posture has a direct impact on voice production, because it allows your muscles to work optimally. When standing, stand straight with your body weight balanced evenly through your feet. When sitting, make sure your lower back is supported, your feet are flat on the floor and your shoulders are relaxed.

Helpful tips for your voice:

- devise ways of attracting attention
- use a gentle voice
- reduce background noise
- make sure you have other people's attention when talking
- maintain a good posture.

Try to avoid:

- misusing your voice, for example yelling, screaming or straining
- doing voice impressions (such as 'big bad wolf' or other voices when storytelling!)
- whispering
- speaking without sufficient breath
- continual throat clearing and coughing – this can damage the vocal cord
- using irritants such as caffeine, alcohol, or smoking.

Videos on voice care are available on the RCHT video library:
https://healthcarevideos.royalcornwallhospitals.nhs.uk/voice/4192

Laryngopharyngeal reflux

This is also called 'silent reflux' as many patients do not know they have it. It could be present in the background without causing any symptoms until the throat becomes irritated, often by a throat infection.

What symptoms does it cause?

- sensation of a lump in the throat
- voice change
- catarrh/phlegm in throat causing throat clearing
- dry irritating cough
- post-nasal drip
- sensation of food or tablets sticking
- burning sensation or sore throat
- feeling of throat closing over, especially when lying down (laryngospasm)
- persisting throat soreness and catarrh following throat infection or irritation.

What are laryngospasms?

These are episodes of the throat feeling like it is closed over, sometimes associated with noisy breathing. This does not happen in all patients with reflux. This can be quite scary as patients describe they feel like they will stop breathing. It typically happens when lying down as acid is more likely to come into the throat without gravity keeping it down as is the case when we are standing or sitting. The episodes usually resolve without patients losing consciousness.

Why do I have it?

Most people will have acid coming up into the throat occasionally, but only some experience symptoms from it. This might be for several reasons including:

- being more prone to the effects of acid irritation
- having weakness in the muscle that limits reflux at the junction of the gullet and the stomach (the gastroesophageal junction).

If I do not have heartburn or indigestion, could I still have laryngopharyngeal reflux?

Yes, even without heartburn and indigestion it is still possible to have laryngopharyngeal reflux, which can affect your throat and voice.

How is it treated?

We usually recommend Omeprazole 20mg twice a day for 2 months and Gaviscon Advance 10mls four times a day to be taken after meals and before bedtime for 3 months. If symptoms worsen on coming off medication, you may need to take this for longer. Treatment for laryngopharyngeal reflux can be discussed with your GP. If your symptoms persist, discuss this with your GP.

Is there anything I can do to reduce my symptoms?

Smoking – if you smoke, try stopping as it irritates your throat and makes it more likely that you will have reflux. Healthy Cornwall can provide smoking cessation services.

Diet and weight – eat a healthy diet and reduce foods that cause increased acid reflux. This includes foods that are fatty or fried, spicy foods, chocolate, cheese and pastry. Drinks such as coffee, citrus juices and fizzy drink make reflux worse by increasing acid production in the stomach. Drink water instead. Allow several hours after meals before lying down. If you are overweight, acid reflux is worsened. Losing some weight can help reduce symptoms.

Sleeping – consider raising the head of your bed. This makes use of gravity to keep the acid down in your stomach. Do not use lots of pillows under your head as this only makes things worse, increasing abdominal pressure thereby encouraging reflux.

Alcohol – avoid alcohol as it makes reflux worse by relaxing the muscles that try to keep acid down and away from your throat.

Healthy Cornwall can provide support for smoking cessation, diet and weight and alcohol. Visit www.healthycornwall.org.uk for more information.

For further information, please watch 'How to manage laryngopharyngeal reflux' on this link or the QR code:

https://healthcarevideos.royalcornwallhospitals.nhs.uk/voice/4192

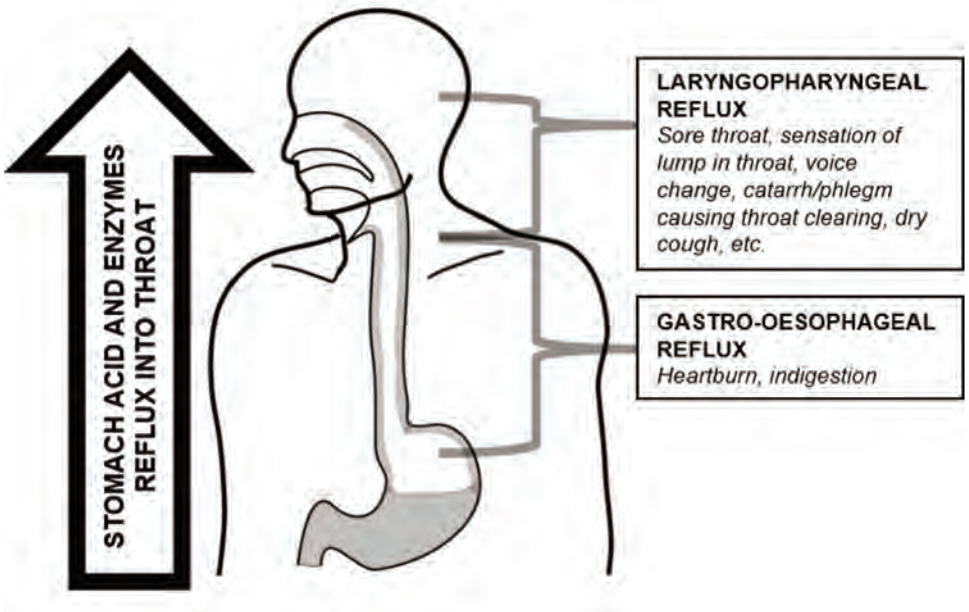


Figure 4: Laryngopharyngeal reflux

Muscle tension dysphonia

What is it?

- This is a pattern of muscle use that results in a change in the sound of your voice. It arises from excessive effort and is also known as voice strain.
- Muscle tension dysphonia can also result in damage to the vocal cords.

These images show what a normal larynx looks like at rest (left) and on making voice (right).

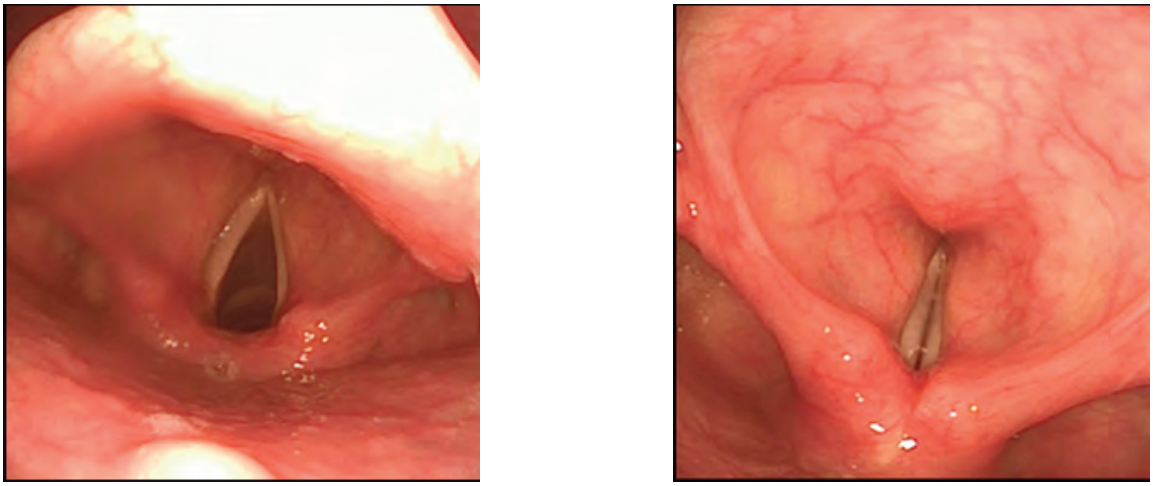


Figure 5: Normal larynx at rest (left) and making voice (right)

The following images demonstrate the larynx at rest (left) and on making voice (right) – note how the muscle tension makes the larynx 'scrunched up' so the vocal cords cannot be seen. Vocal cord movement is restricted and this affects how the voice sounds.

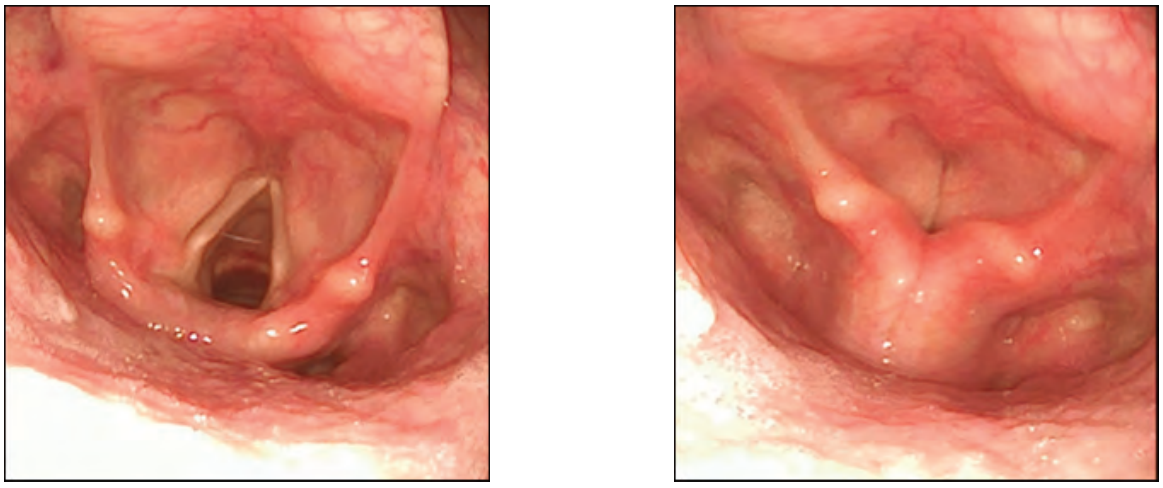


Figure 6: Affected larynx at rest (left) and making voice (right)

What are the symptoms?

- vocal fatigue – your voice might tire and deteriorate with use
- talking can be effortful
- changes to the sound of your voice, ranging from breathy to hoarse / rough or at times no voice
- reduced volume
- you might also notice throat discomfort, irritation and soreness.

How is it treated? What helps?

Speech therapy is the most common treatment. You can help alleviate the symptoms by:

- monitoring for effort when using your voice. Try not to 'push' or strain your voice
- follow relaxation exercises
- release tension in the muscles of your body, particularly your shoulders, neck, face and throat
- avoid clenching your teeth
- keep well hydrated.

Presbyphonia

What is it?

Presbyphonia is the term used to describe age-related changes to a person's voice. As we age, respiratory and laryngeal muscles can decline in strength, and elasticity can be lost (age-related muscle atrophy). This can lead to 'bowing', increased space between the vocal cords when speaking, which can change how the voice sounds.

The image on the left demonstrates a normal gap between the vocal cords on making voice. Notice the difference with the images in the middle and on the right which show presbyphonia with a bigger gap between the vocal cords on making voice.



Figure 7: Affected larynx at rest (left) and making voice (right)

What are the symptoms?

- Less control over your voice so that your voice can seem variable: the pitch, range and volume of your voice may appear reduced.
- Your voice may sound breathy or weak.
- Increased tension in the laryngeal muscles when speaking (to compensate for a weaker voice) can sometimes lead to hoarseness.

How is it treated and what can I do to help it?

Changes to the voice can be a natural part of aging. However, to optimise your voice you can:

- practice good voice care (see the section on 'looking after your voice')
- use good posture and try to relax when speaking.

Speech and Language Therapy

How do I get more help for my voice?

If any of the scenarios in this leaflet sound like they apply to you, and you have not sufficiently improved with the self-help measures suggested, you may benefit from input from the Speech and Language Therapy team.

You need to have been examined by an ear, nose and throat (ENT) doctor within 12 months before you can be seen by the Speech and Language Therapy team. If this has not already happened, please consult your primary care provider to refer you to the ENT team to assess your larynx.

What happens at an ENT appointment?

The ENT doctor will examine your larynx using a thin camera that is inserted through your nose. This procedure is known as a fiberoptic nasendoscopy. Most patients tolerate it very well, but it can cause some discomfort.

If you cannot tolerate the nasal discomfort, you can have local anaesthetic sprayed in your nose. This may give you an unpleasant sensation of a fullness in your throat (you will not have any physical swelling) and may cause you to cough if you swallow liquid before allowing the sensation to wear off. This may take up to an hour and so we recommend that you avoid eating and drinking for an hour after the local anaesthetic is given.

What does speech therapy involve?

For an idea of what to expect from the Speech and Language Therapy team, please watch 'Welcome to the Voice Therapy service' on this link, or using the QR code:

https://healthcarevideos.royalcornwallhospitals.nhs.uk/voice/4192

Most patients are invited to a Voice Information Group for their initial appointment.
At the group session, you will be offered a range of practical tips to care for your voice.

Self referral

If you have been seen by ENT within 12 months and you want further support regarding your voice, you can refer yourself to the Speech and Language Therapy service as follows:

1. Please email referrals.adultslt@nhs.net to request a self-referral form.
2. Please include the date and outcome of your last ENT appointment. Send a copy of your ENT consultation letter (photo, photocopy or PDF of the letter) with the self-referral form. If you do not have this available, please contact the ENT secretaries through the Royal Cornwall Hospital switchboard and ask them to send you a copy of the letter.
3. If you are unable to share the clinic letter, please indicate the date of your last ENT appointment.

Further information

For more information about the voice and voice care, please go to:

www.britishvoiceassociation.org.uk/free.htm

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

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