



Changes to your voice during and following radiotherapy to the larynx (voice box)

Radiotherapy can result in a dry, sore and swollen throat. Radiation to the larynx will affect your vocal cords, producing changes to your voice.

Your voice may be affected in several different ways and could sound:

- hoarse
- weak
- rough
- strained
- breathy

Your voice is likely to worsen as your treatment progresses and there may be times when you lose your voice completely but it should recover over the first three months after your radiotherapy finishes. **However, your voice may not completely return to how it used to be.**

Factors such as tumour size and continuing to smoke will affect your vocal recovery.

You may be hoarse even before your treatment starts – it is likely to become more hoarse during the course of your treatment.

Radiotherapy to other areas of the head and neck may produce changes to your voice too but these are more likely to be temporary with your voice returning to normal after a few weeks.

In some cases one of your vocal cords may become paralysed or move sluggishly meaning that your vocal cords do not come together fully so you will have a weak voice.

Thyroid cancer

If you have had surgery to remove some or all of your thyroid gland then you may have some problems with your voice. This occurs in around half of cases with about 1 in 4 continuing to have difficulties after 6 months.

Looking after your voice

Try to not to strain your voice

When shouting or raising your voice you will be forcing your vocal cords to come together in a much more forceful manner. This can cause further damage to the delicate edges of your cords, producing a poorer quality to your voice. Try to rest your voice as much as possible during your radiotherapy treatment.

Avoid throat clearing/coughing

Every time you cough or clear your throat your vocal cords come together in a forceful manner. This heavy contact can cause your cords to become sore, affecting your voice and also producing extra mucus. As this extra mucus irritates your throat then you are more likely to feel the need to

clear your throat more to try and get rid of the extra secretions. This can produce a vicious cycle of unhealthy vocal habits and becomes difficult to break. Instead of clearing your throat try to sniff, swallow or yawn instead.

Avoid whispering

Although this produces a quieter voice, whispering over a long period of time tends to produce extra strain and tension in the muscles of the voice box. Instead try using a **soft voice**.

Dry air

Breathing in dry or dusty air can dry out the linings of your vocal folds. Try to avoid spending long periods of time in air-conditioned areas and keep well-hydrated. In centrally heated environments you may wish to try placing some water near a heat source, for example under a radiator. Or you could try steam inhalations to moisten your throat. Avoid air sprays and aerosols that release chemicals which may irritate your throat and vocal cords.

Be careful with your diet

Research has shown that acid reflux can cause voice problems. Try to avoid spicy foods, caffeine and alcohol which can all trigger symptoms of reflux.

Drink plenty of fluids

Drinking eight glasses (two litres) a day of water, squash or juice will help to keep your vocal folds healthy. You may need to drink even more during your treatment but **alcohol and caffeine should be avoided** as these tend to have a drying effect.

Give up smoking

Smoking is likely to worsen the side effects of your treatment as it causes your vocal cords to become drier and more swollen.

Smoking cessation support is available at our weekly clinics. To book an appointment or identify support where you live, contact the smoking cessation and alcohol advice team directly on **0161 446 8236** or **0161 918 7175**.

What to do if you are still having problems with your voice

The Christie Speech and Language Therapy Department can help

We usually expect the acute effects of your radiotherapy to settle down 6 weeks following the end of treatment, but if you are still having voice difficulties at this or any point, and are concerned about the quality of your voice, then the speech therapy service can offer you some voice therapy sessions. To plan your therapy effectively, we usually assess your voice first with the ear, nose and throat doctor in the outpatient clinic. A fiberoptic camera is passed through your nose and a recording of your vocal cord movements is made. Following this you will be given advice on how to produce your voice in a healthier way and possibly exercises to carry out at home to try and improve the strength and quality of your voice.

Professional voice users (e.g. teachers, actors etc.) may particularly find this service beneficial.

Voice recovery varies from person to person. Occasionally progress may be slower if your voice box remains swollen, in which case your doctor will continue to monitor and support you. To access our voice therapy service please ask at your routine ENT or clinical oncology appointment to see the speech therapist. We can be contacted directly at the speech and language therapy department in the rehabilitation unit on **0161 446 8046** or **3795**.

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact **patient.information@christie.nhs.uk**

For more information about The Christie and our services, please visit **www.christie.nhs.uk** or visit the cancer information centres at Withington, Oldham or Salford.

Contact The Christie Hotline for
urgent support and specialist advice

**The Christie Hotline:
0161 446 3658**

Open 24 hours a day, 7 days a week

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