

Voice Problems

The voice box is called the “Larynx”, and is situated within the “Adam’s apple”. It contains the two Vocal cords. They vibrate to make sound, just like the reeds in a Wind instrument, or a gum-leaf. Muscles move the Vocal cords, to change their position and tension, modifying the sound. The throat (pharynx), palate, tongue, mouth and lips modify the resonance of the sound, to make words or to sing.

Hoarseness is due a loss of the vocal cords’ ability to vibrate smoothly.

When the vocal cords are rough, or if they don’t both move smoothly, the voice will be rough.

- Vocal nodules (“singer’s nodes”, “screamer’s nodes”) are small scar-like thickenings which occur on each vocal cord of people who overuse and/or strain their voice (a bit like calluses on feet). In fact many teachers, singers, and active noisy children etc have such nodules, but they do not always cause hoarseness. Their presence is a sign of vocal straining, and they will often become less swollen with Speech therapy – Micro-surgical removal is rarely required. (see below)
- A Vocal cyst is a small collection of mucus, usually only on one side - but they can look like nodules.
- A Vocal polyp or granuloma is a little protrusion of the surface of the Vocal cord.
- Vocal papillomas are just warts, but they have a tendency to recur, because complete removal without causing scarring can be difficult, particularly in children.
- Swollen vocal cords and Chronic laryngitis can be due to Reflux laryngitis, tobacco, and are aggravated by voice abuse – the more hoarse you are, the more you have to strain, worsening the hoarseness. Thyroid underactivity can be a problem, easily checked with a blood test.
- Tumours of the voice box are rare. They can be benign, pre-malignant or malignant, and biopsy is required if there is any suspicion by the ENT surgeon. Most are curable nowadays without major surgery. Almost all Vocal cancers are induced by tobacco.
- Vocal cord paralysis is usually due to the effects of previous neck or thyroid surgery, or due to a Viral neuritis (nerve infection). Other causes require investigations, and treatment is Vocal cord medialization operations, either endoscopically, or through a neck incision.
- Age changes cause a sagging of all ligaments, including the vocal cords, causing hoarseness.
- Some patients just have a husky voice, for no obvious reason – “Functional dysphonia”.

Fibreoptic endoscopy is often required to get a good view of the Vocal cords, and to photograph them. Occasionally Video-stroboscopy is even required to better assess the “mucosal wave’s” vibrations, and sometimes Micro-laryngoscopy and even biopsy is needed for diagnosis.

Treatment depends on the cause

- Voice overuse/abuse needs to be avoided in most conditions, and this usually requires the advice of a Speech therapist, who teaches the patient to talk and/or sing without straining. A sensible voice rest is needed - a problem for “professional voice-users”, who cannot completely rest their voice. “Don’t sing unless you’re working”. No smoking, avoid passive smoking, avoid social situations where the voice must be strained to be heard, take singing breaks in quiet non-smoky areas, drink plenty of water, avoid alcohol (which dehydrates and tends to allow louder and less-co-ordinated speech), and no drugs.

- Depending on the cause, microsurgical removal of the offending lesion might be warranted, if the voice is causing enough problems. Except for tumours, removal is never essential, but sometimes the voice won't improve unless the polyp or cyst etc is removed. This is done under a General anaesthetic, as a day patient, via a special telescope (Laryngoscope) through the mouth. The lesion is very delicately cut out, with long tiny instruments or a laser, under microscopic control. There is always a small risk of the problem not being cured, or of leaving a scar or divot that will itself cause hoarseness, which might be incurable. There is also a small risk of chipping the front teeth with the Laryngoscope.

Gastric Reflux And Throat Problems

The Stomach makes and stores acid, which is helps digestion. A one-way valve (the Gastro-oesophageal sphincter), where the Oesophagus (gullet) joins the stomach, is meant to stop the acid spilling up into the oesophagus. It often doesn't work perfectly – this spillage is called “Reflux”.

- Certain things worsen reflux – Hiatus hernia, obesity, pregnancy, tobacco, spicy foods etc
- Typically, reflux causes indigestion and burning – called “Heartburn” (it has nothing to do with the heart). Reflux can cause oesophageal inflammation (oesophagitis), and even ulceration. It can eventually cause scarring and even a stricture. **Often, the reflux does not cause any burning pain at all – but it still spills up the gullet to the throat, especially at night, when the patient lies down.**

Reflux can cause throat problems:

- Irritation, a feeling of throat mucus
- Cough, even asthma or bronchitis
- Voice problems, even hoarseness, vocal nodules, or ulcers
- Cricopharyngeal spasm – feeling of a “lump” in the throat

Although ENT surgeons often see and diagnose patients with Reflux-related problems, it is treated by a General Practitioner, and perhaps a Specialist Gastro-enterologist. Reflux often does not show on X-rays such as a Barium swallow, or even at Oesophagoscopy. Sometimes a 24-hour pH (acidity) study is required.

Reflux Laryngitis causes reddening and thickening of larynx (voice box and vocal cords), especially the back (posterior) half, due to constant spillage of the acid over this region, causing a low-grade burn. This can cause huskiness, hoarseness, and even Vocal nodules.

Crico-pharyngeal spasm is usually caused by Reflux. The Crico-pharyngeus muscle sits just behind the voice-box, and encircles the top of the gullet. It is closed most of the time, only relaxing to open, as part of the “swallowing reflex”. When food is pushed to the back of the throat by the tongue, the muscle relaxes, food goes through into the gullet, and this starts the peristaltic waves that push the food down into the stomach. In Reflux, the muscle is irritated, it still relaxes for food, but not always for saliva. Such patients feel a “lump” in their lower throat, worse with swallowing saliva, and relieved by eating. Food does not get stuck – confirming that there is no growth or tumour.

- Anxiety, even just thinking about swallowing as you do it, and especially fear of cancer, worsen this spasm and the “tight” feeling.



Treatment Of Reflux

Simple measures help to a minor degree – Avoid spicy foods, avoid food for at least 2 hours before bed-time, take an antacid (Quik-eze, Mylanta, Gaviscon etc), and elevate the head of the bed (preferably on bricks rather than just propping up on pillows). Acid-suppressing medications are usually required, often for prolonged times, maybe forever.

- H2 antagonists – Ranitidine (Zantac, Rani etc) etc are fairly good and cheap
- Proton Pump Inhibitors - (Somac, Losec etc) work best, but sometimes need a double-dose.

Surgery to repair the faulty valve (Endoscopic Nissen Fundoplication – by a General surgeon skilled in “key-hole” surgery) is quite effective, and can get patients off tablets forever.