



Voice Disorders following Acquired Brain Injury

Voice changes can occur for many different reasons.

- Some reasons are non-medical - such as tension, anxiety, talking without resting, smoking, talking while you have a throat infection and yelling
- Some reasons are medical - such as a stroke, head injury, tumour, autoimmune condition, Parkinson's disease or cancer

Symptoms of a voice disorder...

- *Strained or strangled voice quality*
- *Breathy or hoarse voice quality*
- *Tiredness (from increased effort) after speaking*
- *A voice that doesn't carry well over background noise*
- *No speech / voice production*
- *Frequent throat-clearing or coughing*
- *A voice that does not have the usual variability in pitch range or variation*



The voice disorders more commonly seen following an acquired brain injury are:

➤ **Dysphonia**

Some people have nervous system changes that produce a *tremor* of the vocal cords. Others may have *dystonia*, another kind of neurologic disorder that creates abnormal muscle tone. In rare cases, people can have spasmodic dysphonia symptoms due to acute or chronic life stress.

➤ **Vocal cord paralysis**

Everyone has two vocal cords in his/her larynx (voice box). The vocal cords vibrate during speech to produce voice. If one or both vocal cords are unable to move then the person will experience voice problems (and possibly breathing and swallowing problems).

There are different types of vocal cord paralysis:

- **2 sided (Bilateral) vocal cord paralysis** involves both vocal cords becoming stuck halfway between open and closed and not moving either way.
- **1 sided (Unilateral) vocal cord paralysis** is when only one side is paralysed or has a very limited movement. It is more common than bilateral paralysis. The individual will run out of air easily. They will be unable to speak clearly or loudly.

(American Speech and Hearing Association).

Simple treatment options if you have a voice disorder...

- **See an Ear Nose and Throat (ENT) specialist.** This is your first step to treatment, where the specialist will use a camera to have a look at your vocal cords. This will let you know what is going on and what treatment options you have
- **See a Speech Pathologist for voice therapy**
Therapy is targeted at the cause of the disorder and may consist of specific exercises, as well as compensatory strategies to maximise your voice output
- **Consider getting an opinion about Additional medical treatment**
This is usually done after completing therapy for the impairment, and may involve Botox injections into the vocal cords
- **Modify your environment**
Make the communication environment as optimal as possible for your needs. Examples include turning off the TV, sitting in the quiet area of the café, and turning down the radio
- **Look after your voice**
In addition to therapy, you can follow simple voice preservation strategies. Examples include taking regular speech breaks, avoiding background noise, using good breath support for speech, and trying to keep stress levels manageable
- **Look after your vocal cords**
Follow simple 'vocal hygiene' options to help maintain healthy vocal cords. Examples include avoiding dehydrating drinks (alcohol, caffeine), avoiding certain medications (antihistamines, cold & flu medications), avoiding drugs (tobacco, marijuana), and avoiding

