



ABIOS

Acquired Brain Injury Outreach Service

FACTSHEET: Communication

Audience: Family and Support Workers

For further information contact the
Acquired Brain Injury Outreach Service (ABIOS)

Ph: (07) 3176 9506

Email: abios@health.qld.gov.au

Voice Disorders following Acquired Brain Injury

Voice changes can occur for many different reasons. While many 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, an autoimmune condition, Parkinson's disease or cancer.

Signs of a voice disorder:

- ✚ Strained, hoarse, croaky, shaky, or strangled voice quality
- ✚ Breathless or hoarse voice quality that is difficult to be heard
- ✚ Tiredness (from increased effort) after speaking
- ✚ A voice that doesn't carry well over background noise
- ✚ No speech production
- ✚ A feeling that it is an effort to use voice
- ✚ Frequent throat-clearing or coughing
- ✚ A voice that does not have the usual variation in pitch

Any of these symptoms can happen when the vocal cords are not working effectively.

(Adapted from Speech Pathology Australia).

The most common voice disorders following ABI are:

(1) Dysphonia

Symptoms come from more than one source.

Some people appear to have nervous system changes that produce an organic 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 intermittent dysphonia symptoms because of acute or chronic life stress.



(2) Vocal fold paralysis

Everyone has two vocal cords in his/her larynx (voice box) which 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:

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

(American Speech-Language-Hearing Association)

What can help a person with a voice disorder?

1. The first step is to be seen by an Ear Nose and Throat (ENT) specialist. The specialist will view the vocal cords using a small flexible scope, and this information will provide a diagnosis to guide treatment options
2. A Speech Pathologist will then target the impairment via therapy. Specific exercises can be developed and / or compensatory strategies can be taught
3. Medical and / or pharmacological treatment can be explored, usually after therapy has been tried
E.g. Botox injections into the vocal folds
4. Modify the environment to make it communication friendly
E.g. turn off the TV, meet at a quiet location & consider the size of groups
5. Help the person maintain appropriate voice strategies
E.g. take regular breaks, avoid background noise, use good breath support for speech, and keep stress levels manageable
6. Help the person maintain appropriate voice hygiene –
E.g. avoid dehydrating drinks (alcohol, caffeine), medications (antihistamines, cold & flu medications), drugs (tobacco, marijuana), and menthol-based throat lozenges.
7. Encourage the person to persist and remind them to use strategies to get their message across

