Metro North Hospital and Health Service

Royal Brisbane and Women's Hospital

In patients with a voice disorder, vocal cord vibration may be abnormal due to growths on or around the vocal cords, neurological disorders resulting in abnormal muscle function or control, or abnormal habitual use of the voice mechanism.

Who:

- Individuals who have experienced a recent change in voice quality or who have become concerned with a hoarse voice.
- Voice disorders affect people from all walks of life including singers, actors, teachers, business professionals, labourers, and retirees.





Royal Brisbane and Women's Hospital Metro North Hospital and Health Service Speech Pathology Department Phone: (07) 3646 8026 Fax: (07) 3646 5625



Speech Pathology Department Royal Brisbane & Women's Hospital Butterfield Street, HERSTON, Q, 4006 07 3646 8026

Voice Clinic





Voice Evaluation:

Individuals receive a thorough evaluation by an Ear Nose and Throat (ENT) doctor and a Speech Pathologist (SP). The ENT is a specialist in medical and surgical management of diseases of the larynx. The ENT performs a fibreoptic nasoendoscopy – a medical procedure that produces a clear view and accurate assessment of the vocal mechanism (vocal cord structure and function). This enables accurate diagnosis of the voice disorder. You do not need to fast prior to this assessment.

The endoscope is a narrow fibreoptic tube that allows the ENT and SP to see the vocal cords.



Figure 1 - Fibreoptic nasoendoscope

A local anaesthetic spray is often required to numb the nasal passage and back of the throat before the endoscope is inserted. Note this spray may leave an altered taste for several hours. Usually the endoscope is passed through the nostril over the soft palate and into the pharynx.

The scope is linked to a camera and a television monitor to enable everyone present to see the vocal cords at work.

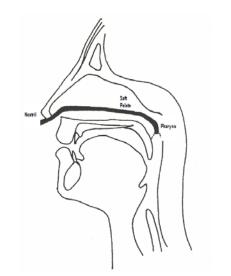


Figure 2 - Position of fibrescope during nasoendoscopy

With the endoscope in place, speech and non speech activities are explored. The assessment comprises standard activities including: observing the voice box at rest, deep breathing, prolonged sounds at different pitch and loudness levels, repeating sentences and singing.

The scope may be in place for a variable length of time, 40 seconds to 10 minutes.

During these activities the ENT assesses vocal fold appearance, mobility, structure, and behaviour, while the SP assesses voice use and in some cases the effectiveness of therapy.

At the completion of the assessment there is an opportunity to discuss diagnosis of the voice disorder and options for management. Following this, the ENT and SP meet to discuss findings and develop a treatment plan.

The Voice Box:

The normal voice box is characterized by smooth, white vocal cords that move symmetrically as the laryngeal muscles position the cords apart from each other during respiration or toward each other for speech. In the normal individual, the vocal cords vibrate symmetrically and periodically during speech.



Figure 3 - Normal vocal cords