**Vocal Fold Paralysis Treatment Techniques and Approaches**

Behavioral voice therapy can be used to treat vocal fold paralysis especially when a weak breathy voice is involved. It at times works alone or in combination with other medical treatments. This all depends on the respective patient’s vocal performance as well as history. It also has proven very useful in the prognosis as well as identifying the history of the paralysis. Verbally interviewing the patient can help establish: whether they have problems swallowing, they keep clearing their throat and generally their pattern of voice use.  All these are typical symptoms of voice of the paralysis. The patients response to voice therapy cannot just be evaluated based any single component be it perpetual or acoustic ratings.

When to offer voice therapy should depend on the patient’s laryngeal behavior, objective rating and gender. It should be noted that female patients respond better to this therapy. However, any patient’s possible benefits can be seen after two or more session. It is suggested that the minimum therapy period be 4-6 weeks. Clinical intervention should only be considered after 6 months of continuous failure of this treatment. For such patients it works just before and after restorative surgery.

There are two main patterns of voice symptoms. Hypofunctional relates directly to the disorders symptoms while hyperfunctional is associated with voice strain and fatigue. The therapy’s hypothesis is developed based on the respective patient’s performance. As any of the symptoms reduced or completely been eliminated?

Voice therapy procedures are divided into two that is direct and indirect tasks. The tasks involved with the indirect approach include: taking the patients history, vocal hygiene, counseling and maximizing posture. Generally, they address problems that result from the patient’s attempt to compensate for the disorder. The direct approach on the other hand, involve: normalizing the expiratory drive, decreasing the transglottal pressure and optimizing medical compression of vocal folds. They are supposed to improve the closure of the glottis.

This treatment is only effective when the patient is consistent in the modification of their vocal production depending on their need. Constant practice is also necessary so that the patient can increase their stamina. Patients who are often in noise environment respond poorly due to the increased physiologic effort.

This is a study on the effectiveness of strengthening of the expiratory muscles in treatment of vocal fold paralysis among older adults. The strengthening was done through swallowing as well as voice production. Both of which can be used by a speech therapist. The variables involved were: phonation time, conversation intensity, and intensity range. On the other hand, swallowing variables include: tongue function, isometric pressure as well as swallowing pressure. The aim here is rehabilitating the vocal cords.

Swallowing is the passage of food and liquid through the mouth to the stomach. Swallowing problems just like vocal ford paralysis is a result of neurological disorders. It causes problems such as dehydration and malnutrition. Speech and language pathologists are trained to diagnose and treat this problem. Furthermore, understanding the swallowing problems helps them solve vocal cord problems. Tongue movements are usually mediated by the suprahyoid, a muscle that anchors the larynx which in turn is very vital to speech. If this muscle is strengthened, weak breathy voice is eliminated completely.

Knowledge of etiology factors in a voice disorder is very vital to a speech and language pathologist in developing a treatment plan. A strong as well as minimally damaged voice production mechanism is their goal for any vocal ford paralysis. To strengthen the whole speech mechanism a number of methods are useful. The KAYPentax Multi-Speech software is one of them. It is used to measure the maximum phonation time. As the patient practices on this machine they get to strengthen their expiratory muscles as the phonation time increases. The Iowa Oral Performance instrument has also proven very useful. It sets-up a baseline for tongue to palate pressure. This is known to be the most effective way of strengthening the expiratory system and thus treating vocal fold paralysis.

Voice therapy technique is any kind of technique that changes voice through a behavioral manner. It is majorly used in treating vocal fold paralysis. The Lax Vox technique is a voice therapy technique that uses multiple mechanisms without force. It has been proven to normalizing a vocal fold paralysis patient’s voice effectively. A normal voice is described as one that is loud, hygienic, flexible, presentable and pleasant.

In this technique the patient should relax and focus on their posture and breathing. The face, neck, upper back and chest muscles should be freed towards gravity. Then they place tube of approximately 35cm in length, 9-12mm in diameter into the mouth. The bottle should be held should be close to the body but low and the tube dipped. They then inhale through the nose. The focus at this point is on the abdomen as well as lower back muscles. The next thing is blowing into the water with their voice and repeats it severally. Keep advancing the phonation style with time. Adopt this style to the daily routine.

The aim of this technique is maximizing the vocal efficiency. The issue here is the glottal efficiency, which is in our case the output-cost ratio. The voice gets projected well and gives a sensation of vibration. Different patients respond differently to this method. Its success depends on: the extent of the patient’s disorder, their doctor and most importantly their attitude to the technique. As illustrated it is a simple procedure that is easy to learn, remember and even teach. A clinician is not required every time but can be consulted regularly.

**References**

Follmer, A. (2013). The Effects of Expiratory Muscle Strength Training on Swallowing and Voice Measures in Healthy. Milwaukee, US: University of Wisconsin.

Sihvo, M. & Denizoglu, P. (2009). VOICE THERAPY TECHNIQUE: LAX VOX. Tampere, Finland: Tampere University Hospital

Stewart, C. & Allen, E. Voice Therapy for Unilateral Vocal Fold Paralysis. Chapter 7, (pp. 95-107)