

## **The King's Speech was Dysarthric, Too**

*An analysis of treatment procedures reveals that fluency was not the only issue*

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Discussions of the Oscar winning movie, *The King's Speech*, have focused on the problem of stuttering and its impact on communication. This certainly has been a boon to our profession and a help to public understanding of this issue. But there has been one glaring omission in all these discussions: The king's speech was dysarthric, too.

### *Dysarthria*

The diagnosis of dysarthria often is restricted to clients with diagnosed neuromuscular disorder. This tradition began in modern times with the definition put forth by Darley, Aronson, and Brown (1975). They defined what most today still hold up as the basic definition of dysarthria:

*“Dysarthria comprises a group of speech disorders resulting from disturbances in muscular control. Because there has been damage to the central or peripheral nervous system, resulting in some degree of weakness, slowness, incoordination, or altered muscle tone characterizes the activity of the speech mechanism” (Darley, Aronson, and Brown, 1975, p. 2).*

Darley, Aronson, and Brown's book divided motor speech disorders into two groups: apraxia and dysarthria. Apraxia has become one of the buzzwords of our profession in the past twenty years, but dysarthria has remained a nearly silent first cousin.

Many of the terms Darley, Aronson, and Brown attributed to historical accounts of these patients could describe much of the king's speech. They include: Slurred, sloppy, slow, indistinct, unclear, clumsy, forced, nasal, labored, expressive, drawling, jerky, slobbery, scanning, staccato, sometimes quivering, explosive, tremulous, and barely understood, and sometimes harsh, breathy, and hoarse. They also mentioned that family members describe dysarthric patients as sounding like they were speaking with a foreign body, mush, hot potatoes, or mashed potatoes in the mouth.

### *Mild Dysarthria*

Classic views of dysarthria usually are associated with severe neuromuscular disorders such as cerebral palsy, Parkinson's disease, cerebellar disorders, stroke, traumatic brain damage, and so forth. But there are clients with mild forms of the disorder with unknown etiologies, and it is my opinion that this was King George's problem.

Mild dysarthria has been discussed throughout the history of our profession. Charles Van Riper, the great father of modern speech therapy, discussed a group of clients who could be diagnosed with mild dysarthria. He classified these problems as "motor in-co-ordinations," and he referred to these clients as "clumsy-tongued individuals" and "the slow of tongue." Van Riper was describing mild dysarthria when he wrote:

*"Articulation cases are occasionally seen who could truly be called the slow of tongue... Sometimes these poorly coordinated movements seem to be localized about the mouth. The tongue, jaw, soft palate, all are sluggish" (Van Riper, 1947, p. 132).*

By the 1970's, the term *functional articulation disorder* was the term used most frequently to describe mildly dysarthric patients. In a classic book that represented the state of the art, Powers described these clients as having *general oral inaccuracy*. She described them as follows:

*"In cases of general oral inaccuracy any or all ... aspects of articulation may be inadequate. Movements are approximate rather than precise, broad rather than small surfaces are sometimes contacted, and contacts are made at the wrong place. In some cases movements are fairly accurate but are slow, weak, or underenergized, so that, though contacts are made, they are not tight or firm. The speech is spoken of as 'careless,' 'lazy,' [and] 'sluggish' in its milder forms; [And] 'indistinct,' 'confused,' 'mutilated,' 'distorted,' [and] 'unintelligible' in its more severe forms" (Powers, 1971, p. 845).*

### *The King's Speech*

Colin Firth's excellent portrayal of the king demonstrated all the characteristics associated with mild dysarthria with an unknown etiology. Putting aside the issues of fluency, King George demonstrated the following characteristics that always are assigned to dysarthria. These were severe at first, and milder as the movie progressed over time in treatment:

- Distortion of vowels and diphthongs
- Distortion of consonants (The king distorted /r/, /l/, and the sibilants)
- Poor control of loudness, stress, and emphasis
- Problems with rate and rhythm; poor timing of speech

- Inappropriate pauses, hesitations, and a halting quality
- Poor regulation of intonation patterns

### *The King's Speech Motor Control*

We also know from the techniques portrayed in the movie that the king demonstrated the variety of problems in speech motor control that are characteristic of dysarthria:

- *Problems in respiration:* Reduced breath support causing breath holding, limited inhalation capacity, poor regulation of exhalation, and an inability to sustain exhalation during speech. His therapist, Lionel Logue, had the king involved in breathing exercises as a result.
- *Problems in phonation:* Limited vocal control, periodic aphonia, and periodic vocal prolongation. Logue had the king involved in vocal exercises to strengthen the voice, to stimulate voice prolongation, to induce better rate and rhythm, and to influence intonation and stress patterns as a result.
- *Problems in resonance:* Stiffness in the velo-pharyngeal mechanism causing slightly poor oral-nasal resonance balance. Logue had the king involved in activities to improve both oral and nasal sounds as a result.
- *Problems in oral movement:* Restrictions in range of jaw, lip, and tongue movement due to stiffness. Logue had the king involved in oral-motor activities to reduce tone in the oral mechanism, and activities to increase range and flexibility of oral movements as a result.

### *A Modern Analysis*

Let's look at this from a modern therapist's perspective, a perspective that is based on a two simple ideas that are commonly understood about motor control.

First, the following sequence is commonly known: (1) Low overall tone can cause stiffness of muscles as clients try to move against gravity; (2) Stiffness of muscles causes body part fixing; (3) Body part fixing causes limited range of movement and the development of abnormal movement patterns. This seems to be the king's situation. Lack of core stability due to low overall muscle tone probably was his initial motor issue. In the movie, depressed core strength and stability was described as a "flabby tummy" and there was a discussion of leg bracing in childhood that may or may not have been related to low tone. Logue addressed the low abdominal tone with a series of exercises to strengthen the abdomen and to influence better diaphragmatic control for speech breathing.

Second, stiffness limits mobility and must be eliminated so that more appropriate movement patterns can be facilitated. It was evident from the movie that the king tightened up his glottis, velo-pharyngeal apparatus, and oral

mechanism (jaw, lips, tongue). We know this because Logue initiated activities to inhibit stiffness in the upper body, shoulders, neck, face, lips, and jaw. Recall the scenes during which Logue had the king hopping up and down and shaking the whole body and shoulders to loosen them, and shaking the head and face to loosen the jaw, lips and tongue. Rolling back-and-forth on the floor also is a classic method of inhibiting stiffness that this therapist employed. The therapist was loosening stiffness so that he could re-establish more accurate and advanced speech movements. Notice that the therapist engaged in appropriate speech activities during these inhibition activities. The therapist was inhibiting stiffness and facilitating better speech movements simultaneously.

### *Improvement*

Did the king's speech improve? Yes it did. Why? Because his therapist integrated the motoric, the auditory, the psychological, and the cognitive issues together into a comprehensive treatment program designed to reduce the effects of the dysarthria and the dysfluencies. This was not just fluency therapy; it was treatment for dysarthria as well, for improvement of articulation. Lionel Logue did not follow a cookbook of treatment techniques, nor did he just have King George read words, sentences, and paragraphs as some assume we are to do today. His therapy was an individualized creative design based upon his scientific understanding and prior clinical experiences.

### *Summary*

In sum, an analysis of the therapy program portrayed in *The King's Speech* suggests to this therapist that King George had mild dysarthria compounded by intense stress around speaking and family matters. He struggled with both articulation and fluency as a result. Dysfluencies became the king's biggest issues as portrayed in the movie, but it is this therapist's opinion that mild dysarthria was the root cause.

### **References**

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