



DYSARTHRIA

What is Dysarthria?

Dysarthria impairs the intelligibility of speech. Sounds may be slurred, and speaking may be slowed and effortful. Symptoms of dysarthria can vary depending on which muscles are involved in the speaking process. If the muscles of the lips are weakened, then the sounds “p” or “b” or “m” may not be produced precisely. If the tongue is weakened, then sounds such as “t” or “d” or “n” may be difficult to understand.

Similarly, if muscles connected to the vocal cords are affected, then the voice can be soft, breathy, or harsh.

What causes it?

Dysarthria is usually the result of damage to the nerves that help certain muscles function. Many neurologic diseases can lead to conditions that affect the speech process.

Some of the more common are Parkinsons, multiple sclerosis, amyotrophic lateral sclerosis or Lou Gehrig’s disease, and cerebral palsy. Also, strokes, head injuries, and tumors can be responsible for dysarthria.

Who can help?

Different specialists can become involved, depending upon the type and symptoms of dysarthria that are present.

Speech-language pathologists often become key therapists in the treatment of obvious speech symptoms. However, physicians can become involved in prescribing medications such as L-DOPA which can result in more controlled muscle movement and clearer speech for Parkinsons patients. Surgeons, physical therapists and occupational therapists also can offer help.

What can be done?

The main goal of treatment often becomes enhancing whatever abilities are left to the patient, such as strengthening the muscles of the lips as much as possible, or improving the movement of the tongue. It may also involve learning new ways of producing speech to compensate for weak or poorly functioning muscle groups.

Alternatives to speech may sometimes be necessary if dysarthria is severe and does not improve sufficiently with treatment. Sometimes communication is most effectively produced without verbal expression. Then alternatives can be gestural such as sign languages and finger spelling, or pointing to letters, pictures, and symbols on a board or in a book.

Electronic systems can be simple with synthesized voice or expression, or can be sophisticated computer based systems. There is a vast array of alternatives to verbally expressed speech.

Exercises for the lips

1. Open your mouth as wide as possible, as if you are yawning, and hold for 2 seconds.
2. Pucker your lips, as if you are about to kiss, and hold for 2 seconds.
3. Alternate #1 and #2, doing the sequence 5 times.
4. Spread your lips as wide as possible, as if

you are making a big smile, and hold for 2 seconds.

5. Keep your teeth together, while saying these sounds precisely; “ba”, “be”, “bo”, “boo”.

Exercises for the tongue

1. Stick the tongue straight out, then put it in one corner of the mouth, then the other. Do this 10 times.
2. Stick the tongue straight out, then wipe it 10 times in a circle (360 degrees) around the lips.
3. Make 10 tongue “pops” (not “clicks”) by sucking the tongue against the hard palate then releasing it.
4. Pretend you are licking an ice cream cone 10 times in an exaggerated way by trying to touch your tongue on your chin and then up near your nose.
5. Repeat “t” loudly 10 times, then repeat the sequence: “la”, “le”, “lo”, “loo” 10 times.

Exercises for the palate

1. Puff out your cheeks like a balloon by sealing your lips. Hold the air in your mouth while you gently press on the cheeks. Do this 5 times.
2. Blow on a straw, but put your finger on the other end of the straw to hold the air in while you count to 5. Do this 10 times.
3. Say “shhh” until the end of your breath 10 times without allowing any air to come through the nose.
4. Say this sequence 10 times: “ga”, “ge”, “go”, “goo”.
5. Chew sugarless gum, which will stimulate your need to swallow frequently.

Exercise for the vocal cords

1. Breathe deeply (from the diaphragm) whenever you speak.
2. Don’t speak at the end of your breath. Instead, use shorter phrases.
3. Hum along while you listen to the radio.