

How do Symptoms Change or Progress Over Time?

Individuals with spasmodic dysphonia may first notice hoarseness or a “sore throat” that does not go away. Symptoms can then evolve over a relatively brief period of time before stabilizing.

Most cases of spasmodic dysphonia occur in isolation, meaning that the larynx is the only organ affected by dystonia. However, for other patients, dystonia may eventually involve different areas, including the eyelids (blepharospasm), the jaw (oromandibular dystonia), or the neck (cervical dystonia). It may also occur in the context of childhood-onset generalized dystonia, which affects multiple body parts including the limbs.

What is the Cause?

Researchers are investigating possible triggers of spasmodic dysphonia, including genetic factors. Some genes that predispose patients to develop spasmodic dysphonia have already been identified, and about 12% of individuals with spasmodic dysphonia have a positive family history.

It is possible that trauma can also trigger spasmodic dysphonia either at the time of intubation, for example during surgery, or due to injuries to the neck. Infection or inflammation may also have a role in precipitating this disease.

Experts believe spasmodic dysphonia is the result of excessive signals arising from the brain that cause the vocal cord muscles to contract inappropriately. However, the exact reason why the brain delivers these excessive signals is not completely understood.

What is Spasmodic Dysphonia?

Spasmodic dysphonia (also known as laryngeal dystonia) is a movement disorder featuring involuntary contractions of the vocal cord muscles. These contractions may either result in patterned “breaks” or interruptions in speech, or may give a breathy quality to the voice. Most cases of spasmodic dysphonia develop in adults.

What are the Symptoms?

The voice may sound raspy and strangled, or breathy and whispery, depending on which laryngeal muscles are involved. It may take added effort to speak, but the voice may improve when whispering, laughing, or singing. Symptoms may vary during the day, become aggravated by certain speaking tasks—such as talking on the phone—or increase during stressful situations. Symptoms may improve after sleeping or after consuming alcohol.

Although spasmodic dysphonia may appear at any time during adulthood (and even in adolescence), symptoms most commonly start in people between 40–50 years old.

To learn more about dystonia and the DMRF, contact:

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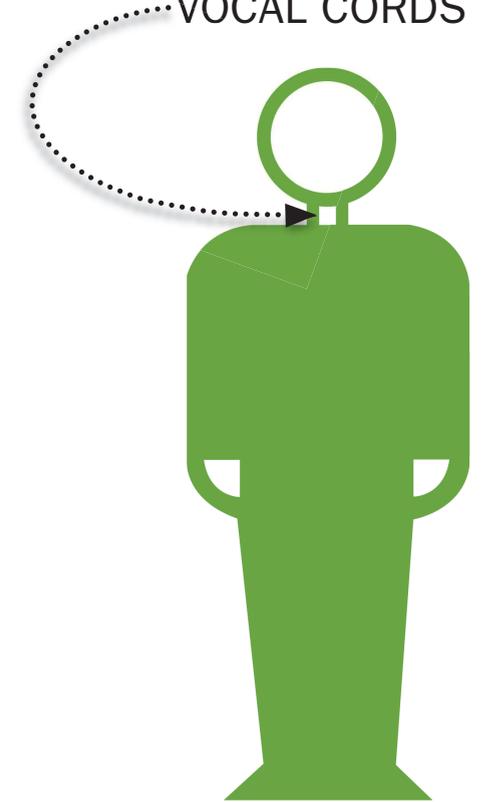
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Connect with the DMRF on Facebook,
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Spasmodic Dysphonia/Laryngeal Dystonia

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Are There Different Types?

There are several forms of spasmodic dysphonia. These are classified as:

Adductor spasmodic dysphonia: This form is the most common. The muscles that bring the vocal cords together contract involuntarily and excessively during speech. This causes a tight, strangled-sounding voice quality, often with abrupt starting and stopping of the voice resulting in a broken speech pattern.

Abductor spasmodic dysphonia: In this form, the muscles that separate the vocal cords contract involuntarily, causing them to be held apart, and resulting in a breathy, whispering voice.

Adductor breathing spasmodic dysphonia:

Also called *respiratory dystonia*, this rare condition affects the muscles that bring the vocal cords together. However, instead of contracting during speech (like in adductor spasmodic dysphonia described above), the muscles do so during breathing. These spasms create noisy and labored breathing. Individuals may also experience trouble swallowing due to difficulty breathing while eating.

A combination of the above: Some individuals have symptoms that resemble more than one classification of spasmodic dysphonia. Others may have a voice tremor and/or tremor affecting adjacent areas.

What Treatments are Available?

Individuals with spasmodic dysphonia may learn compensatory habits, or tricks, to make speaking easier. For example, someone with adductor spasmodic dysphonia that has a very strained, choked-sounding voice may find that symptoms are reduced by whispering. The whispery voice may initially sound like the less common, abductor form because of how the individual is trying to control the symptoms. Humming before speaking or breathing techniques may also be helpful.

For patients whose symptoms persist and require treatment, botulinum neurotoxin injections are generally recommended. Although a medication with the word “toxin” in it may seem unsettling, botulinum neurotoxin injections have decades of research and clinical experience demonstrating that they are safe and the most effective therapy available. Botulinum neurotoxin has been approved for clinical use in the United States since 1989 and has improved the lives of countless individuals with dystonia.

Speech/voice therapy is often incorporated into the treatment plan, especially before and after botulinum neurotoxin injections. Voice therapy can help the fatigue associated with the added effort required to speak. Techniques that focus on controlling the breath and using the breath to make the most of the voice may be surprisingly helpful. Weeks or months of voice therapy may be required.

Oral medications may also be tried but are rarely as effective as injections, and are not without side effects.

In the most refractory of cases of adductor laryngeal dystonia, a surgical procedure called selective laryngeal adduction denervation and reinnervation (SLAD/R) may be an option. Botulinum neurotoxin injections may still be needed following the surgery, and the procedure’s benefits may not be permanent.

How is This Going to Affect My Daily Life?

Living well with spasmodic dysphonia is possible. The early stages of onset, diagnosis, and seeking effective treatment are often the most challenging. The symptoms may vary from mild to severe, and symptoms often fluctuate from day to day. Fatigue is common due to the exertion required to speak. Individuals may have to learn new ways to accomplish daily tasks, particularly those requiring the voice.

Individuals living with spasmodic dysphonia are strongly encouraged to:

- Seek out the best medical care.
- Learn about spasmodic dysphonia and treatment options.
- Develop a multi-layered support system of support groups, online resources, friends, family, and mental health professionals, if needed.
- Investigate complementary therapies.
- Get active within the spasmodic dysphonia and dystonia community.

What Kind of Doctor Treats Spasmodic Dysphonia?

The diagnosis of spasmodic dysphonia may be made by a speech-language pathologist, otolaryngologist (i.e. ear, nose, and throat specialist), and/or neurologist with training in movement disorders. Ongoing treatment may require consultations with multiple specialties. For example, a neurologist or otolaryngologist may administer botulinum neurotoxin injections while a speech-language pathologist conducts voice therapy.

What Support is Available?

The Dystonia Medical Research Foundation (DMRF) can provide educational resources, self-help opportunities, contact with others living with spasmodic dysphonia, volunteer opportunities, and connection to the greater dystonia community.

What is the DMRF?

The Dystonia Medical Research Foundation (DMRF) is a 501(c)3 non-profit organization that has served the dystonia community since 1976. The DMRF funds medical research toward a cure, promotes awareness and education, and supports the well being of affected individuals and families.

The DMRF can put you in touch with others with dystonia for networking and support.