Spasmodic Dysphonia

What is spasmodic dysphonia?
Spasmodic dysphonia (SD), a focal form of dystonia, is a neurological voice disorder that involves involuntary “spasms” of the vocal cords causing interruptions of speech and affecting the voice quality.

Is spasmodic dysphonia a form of dystonia?
Yes, spasmodic dysphonia is a focal form of dystonia. Dystonia is the general neurological term for a variety of problems characterized by excessive contraction of muscles with associated abnormal movements and postures. Other focal dystonias include blepharospasm (involving the eyelids), oromandibular dystonia, (involving the jaw and tongue), cervical dystonia or spasmodic torticollis (involving the neck), and writer’s cramp (involving the hand). These forms of dystonia may appear in combination with spasmodic dysphonia.

Are there different types of spasmodic dysphonia?
The two types of recognized spasmodic dysphonia are adductor spasmodic dysphonia and abductor spasmodic dysphonia. Adductor SD causes an intermittent excessive closing of the vocal folds during vowel sounds in speech; while in abductor SD, there is a prolonged vocal-fold opening during voiceless consonants. The control problems of the vocal cords result in different speech symptoms in the two types of disorder. There are three subtypes of SD which have been identified by clinicians. One is a combination of adductor and abductor symptoms in which an individual may demonstrate both types of spasms as he/she speaks. In a second subtype, SD symptoms are accompanied by a voice tremor. A third subtype involves a primary voice tremor that is so severe the patient experiences adductor voice stoppages during the tremor.

What causes spasmodic dysphonia?
The cause of spasmodic dysphonia is unknown. The general medical consensus is that SD is a central nervous system disorder and a focal form of dystonia. Dystonia is the general neurological term for a variety of problems characterized by excessive contraction of muscles with associated abnormal movements and postures. Dystonia disorders are thought to originate in the area of the brain called the basal ganglia, which are that help coordinate movements of the muscles throughout the body.

Who gets spasmodic dysphonia?
Spasmodic dysphonia does not discriminate. Anyone, regardless of race, age, or ethnicity, can manifest symptoms of SD. It is estimated that 50,000 persons in North America are affected by SD, but this number may be higher due to ongoing misdiagnosis or undiagnosed cases of the disorder.

How is spasmodic dysphonia diagnosed?
Spasmodic dysphonia is reported to be one of the most frequently misdiagnosed conditions in Speech-Language Pathology. Because there is no definitive test for the SD, the diagnosis rests on the presence of characteristic clinical symptoms and signs in the absence of other conditions that may mimic spasmodic dysphonia.

Is there a cure for spasmodic dysphonia?
At this time, there is no cure for SD, but treatments are available. Research continues to better understand the cause(s) of SD.

Treatment

Are oral medications used in the treatment of spasmodic dysphonia?
Oral medications provide little relief in the symptoms of spasmodic dysphonia, but if other forms of dystonia are present, medications may help relieve those related symptoms. There are several possible categories of medications used in the treatment of dystonia including anticholinergics, benzodiazepines, and baclofen. The treatment of spasmodic dysphonia must be tailored to the individual patient.

Are botulinum toxin injections a safe and effective treatment?
Yes. Botulinum toxin, a biological product, is injected into specific muscles where it acts to reduce the involuntary contractions that cause the symptoms of spasmodic dysphonia. The injections weaken muscle activity sufficiently to reduce a spasm but not enough to cause paralysis. Local injections of botulinum toxin (BTX) into the vocal cord muscles have proven to be the most effective treatment for spasmodic dysphonia. The treatment weakens the vocal muscles so that spasms are greatly diminished and speech is greatly improved. The treatment can also reduce the breathiness and help decrease the effort required to speak.

What is the role of surgery in the treatment of spasmodic dysphonia?
Surgery for spasmodic dysphonia has recently been re-examined as a form of treatment for people for whom botulinum toxin injections are no longer providing relief of symptoms. Selective Laryngeal Adductor Denervation-Reinnervation surgery involves cutting the nerve to the affected vocal cord and re-innervating the muscle with another muscle to prevent muscle atrophy. This surgery is done...
almost exclusively by Dr. Gerald Berke at the University of California at Los Angeles with promising preliminary results. For some people who have undergone the surgery, symptoms have returned and follow-up with botulinum toxin injections was needed. Studies are ongoing to determine the effectiveness of this surgery.

What role does speech therapy play in the treatment of spasmodic dysphonia?
General voice relaxation techniques and speech therapy may play an adjunct role in the treatment of spasmodic dysphonia. These include reducing one's vocal effort, loudness, intonation, and rate of utterance while increasing pause time between phrases. These techniques can only be reinforced and adapted if they do not intrude on the vocal naturalness.

How are complementary therapies helpful?
Traditional western practices have long been effective in diagnosing problems and assigning treatments but may do little to address how patients live on a daily basis. Medical fields are slowly incorporating a wider range of knowledge to include treatments outside of the traditional scope to better assist patients and to treat the “whole person” - mind, body, and spirit. Complementary therapy may play an active role in your treatment of SD, and it is intended to be used in conjunction with traditional therapies. To avoid any interactions and potential problems, it is important to have open communication among all physicians and practitioners who are working with you.

Support

How do I contact other people who have spasmodic dysphonia?
Once the diagnosis of SD is made, many people find it helpful to be in communication with others who have had similar experiences. One of the goals of the NSDA is to provide support to the people with dystonia and their families. We have various bulletin boards available on-line for posting message along with support groups throughout North America.

What is “on-line” support?
The NSDA has a very active group of volunteers who foster “on-line support” for people with SD. This support includes chat groups and bulletin boards which offer opportunities to share experiences.

Are local support groups available?
Yes, the NSDA sponsors support groups throughout North America and is always looking to expand the network. If there is not a support group in your area and you are interested in starting one, please contact the Headquarters office.

Healthcare Referrals

How do I find a healthcare professional who specializes in spasmodic dysphonia?
The NSDA maintains a directory of healthcare professionals that can be accessed on-line. Finding a healthcare professional who specializes in SD is essential for proper treatment and care. Diagnosis of SD is based on information from the affected individual and the physical and neurological examination.

About the NSDA

What is the mission of the National Spasmodic Dysphonia Association?
Founded in 1989, the mission of the National Spasmodic Dysphonia Association is to advance medical research into the causes of and treatment for spasmodic dysphonia, promote physician and public awareness of the disorder, and sponsor support groups for patients and their families.

What type of programs does the NSDA offer?
Serving the needs of individuals and families affected by spasmodic dysphonia through supportive services is a crucial element of the National Spasmodic Dysphonia Association. The NSDA has support groups throughout North America, sponsors educational symposia, provides educational literature, and has produced the award-winning informational DVD “What is Spasmodic Dysphonia?”