



Spasmodic Dysphonia

Spasmodic dysphonia is a disorder of muscle spasms of your voice box (larynx) when speaking. This may cause your voice to sound interrupted or broken.

Causes

The exact cause of spasmodic dysphonia (SD) is unknown. What we do know is that it is a type of dystonia. Research suggests that this group of diseases is based in a part of the brain that regulates movement by sending signals between the brain and the muscles. In dystonia, abnormal signals between the brain and the affected muscles lead to abnormal muscle contraction, usually during specific tasks. When it involves muscles that are used for speaking, it leads to the voice problems seen in SD.

Symptoms, Signs, and Diagnosis

The main symptom of SD is an abnormal voice that might be worse with some sounds than others. You may notice that it takes more effort to speak and that people may have difficulty understanding you. Your voice can sound strained or tight, or briefly cut out completely with certain sounds. If you have a less common type of SD, you may have unexpected breathy breaks in speech.

Together with a complete medical history and physical exam, the diagnosis is made by an expert physician and/or speech-language pathologist listening to the voice. Laryngoscopy and stroboscopy are tools that are often used to help confirm the diagnosis. It is common for patients to see multiple health care providers before getting to this diagnosis, so it is important to see a physician with expertise in voice disorders.

Treatment

There is no cure for spasmodic dysphonia, but there are several effective treatments available and others being developed. The most common treatment for SD is botulinum toxin (e.g., Botox®) injection into the affected muscle(s). This is a short procedure that can be done in the physician's office. The benefit will last several months and will be repeated when the effect starts to wear off. While it does work for most patients, it can take a few injections before getting the "right" dose. You may need to discuss adjustments in the dose with your doctor if you do not get the ideal effect.

In addition to botulinum toxin injections, there are a few surgical options, which are less commonly used than injections. These options involve operating on the nerves to your larynx or on the larynx itself.

Some oral medications have been used, but none has been proven to effectively treat SD.

Additional Information

National Spasmodic Dysphonia Association at www.dysphonia.org maintains an informative website and provides excellent resources for support groups, updates in research, and more.