

FACT SHEET

Spasmodic Dysphonia (Laryngeal Dystonia)

Spasmodic Dysphonia (SD) is a rare condition described as a form of ‘focal dystonia’ – (meaning that it targets one set of muscle at any one time). It is a neurological condition that causes ‘spasms’ of the larynx which lead to interruptions in fluent speech. These interruptions (or voice breaks) are frequently misunderstood which can result in delayed diagnosis.

SD can cause the voice to break up, be breathy or to have a tight strangled quality. Either way communication can be tiring and frustrating.

Types

There are two main types of spasmodic dysphonia (SD).

- **Adductor** spasmodic dysphonia (AdSD) constitutes approximately 85% of those diagnosed. In AdSD the vocal folds to come together inappropriately during speech.
- **Abductor** spasmodic dysphonia (AbSD) accounts for approximately 13% of those diagnosed. AbSD causes the vocal folds to spread apart during speech creating a void which results in very breathy or soundless voice. In rare cases some people can have a mix of the two conditions.

The cause of spasmodic dysphonia is unknown, but it frequently presents between the ages of 30 and 50 and it is more common in women - but can also occur in men. While some people have a family history of other forms of dystonia, SD is not generally considered hereditary. There are no known dietary or environmental factors which increase the risk of developing the condition

Symptoms

Spasmodic dysphonia presents with difficulty speaking. Affected people typically have trouble especially speaking in background noise or when using the phone. Adductor spasmodic dysphonia causes a strangled and strained type of voice because the vocal folds are coming together too tightly. Abductor spasmodic dysphonia causes a breathy and whispery type voice especially for the second part of many words because the vocal folds are coming apart during speech causing air to leak out.

Spasmodic dysphonia tends to be task specific – i.e. affects the speaking voice. People typically find that they are able to voice more easily when they sing or speak in a foreign accent. Some people find that the voice fluency improves temporarily with alcohol however this is not recommended as a treatment. Some people have associated tremor and a small percentage of people have other types of dystonia or movement disorder.

The symptoms tend to fluctuate from day to day. Anxiety and stress tend to make the problem worse and people tend to experience more difficulty when public speaking.

Treatment / Management

Current best practice treatment of SD is Botulinum toxin injections into the affected laryngeal muscle approximately 3-4 monthly; however Individual response to the treatment may vary, with AdSd generally responding more favorably due to the size and location of the muscle being injected. Following the injections, the vocal folds are temporarily weakened resulting in a very breathy voice for approx 7-10 days this generally smooths out and voice quality improves. In AbSD the muscle can be more challenging to inject due to location, but successful injection will result in a temporary 'tightening' of the vocal folds and may lead to a short period of breathlessness before settling in and reducing the spasms.

Speech Pathology may assist communication by providing some additional voicing strategies, which in turn can help to prolong the benefits of botulinum toxin injections. However speech pathology alone will not generally improve the symptoms of SD.

Surgical options include changing the nerve supply to the vocal folds, but to date this has had mixed results. Surgery is currently considered a last option when impairment is significant and all medical options have failed.