

Type II Thyroplasty for Adductor Spasmodic Dysphonia

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Adductor spasmodic dysphonia (AdSD) is a rare voice disorder characterized by strained and strangled voice quality with intermittent phonatory breaks and adductory vocal fold spasms. The disease is quite resistant to therapy. The first surgical technique used to try and correct AdSD was recurrent laryngeal nerve (RLN) section described by Dedo in 1976. Aronson and DeSanto followed 33 patients for 3 years post RLN section. Thirty-six percent of patients maintained improved voices on follow up. Of the 64% of failed voices, 48% were worse than before surgery. They concluded that the effectiveness of unilateral RLN section for severe AdSD decreases with time and results in voice failure in a sizeable percentage of patients.

Botulinum toxin injection was first used in the mid-1980s for spasmodic dysphonia with good temporary results and minimal morbidity. Since then, botulinum toxin injection has

been the standard treatment for AdSD. However, intralaryngeal botulinum toxin injections are required, usually at a rate of once every three to four months, the exact dosage and injection site can be difficult to determine, and it may result in initial temporary dysphonia caused by incomplete glottic closure.

Type II thyroplasty is based on the hypothesis that the voice symptoms in AdSD are a consequence of excessively tight glottal closure. This surgery differs from previous treatments in that this surgery does not involve any surgical intervention into the laryngeal muscle nerve or vocal fold. In addition, the surgical procedure may be conducted using local anesthesia for monitoring voice changes.

This lecture will focus mainly on the surgical tips and effects of type II thyroplasty for adductor spasmodic dysphonia.