

**Treatment of Vocal Cord Granulomas Using Botulinum Toxin Type A: Similar Responses
with Smaller Amounts (Letter to the Editor)**

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Dear Editor:

We read with great interest the articles by Nasri, et al published in 1995 and de Lima Pontes, et al published in 1999 in *Laryngoscope* regarding use of botulinum toxin type A (BOTOX) in treating vocal cord granulomas.^{1,2} These articles, as well as others, have hypothesized that vocal cord granulomas are triggered by vocal abuse, gastroesophageal reflux, and/or trauma (endotracheal intubation).^{3,4} Treatment is by addressing the underlying etiology of their formation. However, despite therapy, granulomas are prone to recurrence speculated to be due to phonation and/or coughing resulting in repeated injury to the vocal process mucosa stimulating granuloma reformation. As such, BOTOX was used to temporarily weaken the adductor muscles of the vocal cords and allow mucosal healing. All studies have noted a dramatic resolution of the vocal cord granulomas within a few weeks without recurrences.

All such studies reported using 10-15U of BOTOX injected either ipsi- or bilaterally as first described by Nasri.¹ We would like to report that such large dosages are unnecessary for successful treatment. Before we became aware of these prior studies on the use of BOTOX on treating vocal cord granulomas, we have had successful experience using only 1-2U of BOTOX injected either ipsi- or bilaterally into the thyroarytenoid muscle with similar excellent outcomes in patients with persistent and/or recurrent vocal cord granulomas despite medical and surgical treatment. We suspect that the large dosages reported in the literature is overkill and that sufficient paresis to prevent repeated mucosal trauma of the vocal process occurs with far smaller amounts of BOTOX.

Respectfully submitted,

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