

Effect of Unilateral Cordotomy on Perception of Dysphagia

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Abstract

Objectives: CO₂ laser medial transverse cordotomy is a permanent static procedure performed to achieve adequate functional airway in cases of posterior glottic stenosis and bilateral vocal fold paralysis. Although it is the preferred method to manage long-term bilateral vocal fold immobility, it is widely believed that cordotomy has the potential to cause aspiration. The minimal existing data on the effect surgical enlargement of the glottic airway on swallowing function is heterogeneous. Through investigation of dysphagia after cordotomy, we hope to better understand the influence of glottic function and its role in dysphagia. The Eating Assessment Tool (EAT-10), is a validated dysphagia symptom-specific outcome measure. We hypothesized that EAT-10 scores would not change after CO₂ laser cordotomy despite causing glottic insufficiency.

Methods: Retrospective review was performed on sequential patients having undergone unilateral CO₂ laser cordotomy with complete pre- and postoperative EAT-10 questionnaire data available for evaluation.

Results: Fifteen patients were available for analysis; 10 patients underwent primary unilateral medial transverse cordotomy, 5 patients underwent revision cordotomy, and 20 unique procedures were included in the dataset. The median EAT-10 score during the visit prior to surgery was 3.5, whereas the post-surgery median score was 2. Furthermore, the median difference of 0 was statistically non-significant ($P = .91$).

Conclusion: CO₂ laser cordotomy does not contribute to patient-reported dysphagia despite creating glottic incompetence. This suggests vocal fold apposition may play a less significant role in normal swallowing function than widely believed.

Keywords

dysphagia, cordotomy

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