

DIAGNOSING LARYNGO-PHARYNGEAL REFLUX IN THE PRESENCE OF HYPER-FUNCTIONAL VOICE DISORDERS

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OBJECTIVES/HYPOTHESIS: This study aims to evaluate the effects of voice therapy on Reflux Symptoms Index (RSI) score.

STUDY DESIGN: Retrospective, case-control study

METHODS: Twenty-two patients underwent voice therapy in a tertiary academic center for various etiologies (muscle tension dysphonia 9, vocal nodules 4, vocal polyp 3, vocal fold edema 1, scar 1, other 4). Epidemiologic data was ascertained from the study group. All patients completed the Voice Handicap Index-10 (VHI-10) questionnaire and the RSI questionnaires, before and after treatment. Voice acoustic analysis was recorded using the PRAAT system before and after voice therapy.

RESULTS: Data was analyzed for the entire group (22 patients) and separately for two subgroups; patient treated for gastroesophageal reflux (GERD) (10 patients) and patients not treated for GERD (12 patients). Mean VHI-10 values dropped from 19 to 12 ($P=0.0004$) in the entire group, 19 to 13.9 in the GERD treated group and 19 to 11.6 in the no GERD treatment group. RSI mean score dropped from 16 to 11 ($P=0.0038$) in the entire group, from 17.8 to 15 ($p=0.2$) in the GERD treated group and from 14.75 to 8 ($p=0.004$) in the no GERD treatment group. While the non-GERD treated group showed significant improvement in NHR, Jitter and shimmer the GERD treated group showed significant improvement in NHR alone.

CONCLUSION: Voice therapy results in a decrease in Reflux Index Symptom score from above normal values to normal values. This result may be attributed to the symptom overlap between laryngopharyngeal reflux and hyper-functional voice disorders. Caution is suggested when relying on RSI questionnaires for the diagnosis of reflux in the presence of hyper-functional voice disorders. GERD control is needed for improved voice therapy efficacy