

# Effectiveness of a physiologic voice therapy program based on different semioccluded vocal tract exercises in subjects with behavioral dysphonia: A randomized controlled trial

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## Abstract

**Purpose:** The present study aimed to assess the effectiveness of a physiologic voice therapy program based on different semioccluded vocal tract exercises in subjects with behavioral dysphonia.

**Methods:** Thirty-four participants with behavioral dysphonia were randomly assigned to one of two treatment groups: 1) voice treatment with physiologic voice therapy plus vocal hygiene program (n = 20), and 2) vocal hygiene program only (n = 14). Laryngoscopic assessment was performed in all subjects. Before and after voice therapy, participants underwent aerodynamic, electroglottographic, and acoustic assessment. The Voice Handicap Index (VHI), Voice symptom scale (VoiSs), Vocal tract discomfort scale (VTDS), and self-assessment of resonant voice quality were also performed. The treatment included eight voice therapy sessions. For the experimental group, the exercises consisted of a sequence of seven phonatory tasks performed with four different semioccluded vocal tract exercises (SOVTE). Comparison for all variables were performed between experimental group and control group.

**Results:** Wilcoxon test showed significant improvements for experimental group for VHI, VoiSs, VTDS (decrease), and self-perception of resonant voice quality (increase). Significant decrease for experimental groups was observed on subglottic pressure, phonation threshold pressure, and glottal airflow across the implemented tasks.

**Conclusion:** Physiologic voice therapy based on semioccluded vocal tract exercises seems to be an effective tool to improve voice in subjects diagnosed with behavioral dysphonia. Apparently, most changes should be expected in variables related to physical and functional aspects compared to objective variables. Subglottic pressure and phonation threshold pressure seem to be the most change-sensitive parameters and they may reflect a reduction in phonatory effort reported by patients after voice therapy.

## Palabras clave

**Palabras clave de autor:** [Tube phonation](#); [Voice therapy](#); [Aerodynamics](#); [Semioccluded vocal tract](#); [Voice symptoms](#)

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