

# VOCAL CHARACTERISTICS AND LARYNGOSCOPIC FINDINGS IN FUTURE MUSICAL THEATER PERFORMERS

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**Objective:** Musical theater performers are a special group of elite vocal performers with a high vocal load as they combine singing, acting and physical performance. As they are absolutely depending on their voice quality and vocal capacities for their studies and their future profession, an optimal voice production is very important. The purpose of this study was to determine the voice quality of musical theater students. The voice quality of seven students was then re-evaluated one year after the first assessment.

**Methods:** Thirty-one musical students (seven men and 24 women) with a mean age of 20 years participated in the study. To determine the voice quality, objective (aerodynamic measurements, voice range profile, acoustic analysis and Dysphonia Severity Index) and subjective (videolaryngostroboscopy, Voice Handicap Indexes, and questionnaires regarding voice symptoms and risk factors) voice measurements were performed.

**Results:** The median DSI in male and female musical students was respectively 5.3 and 5.7, both corresponding with an overall good voice quality. The questionnaires revealed the presence of vocal fatigue, dryness of the throat, vocal tract discomfort and harmful vocal habits in the majority of students. In 45% of the subjects videolaryngostroboscopic evaluation of the vocal folds showed an organic lesion. The majority of these lesions are inflammatory lesions (26%). In 68% of the subjects a certain degree of supraglottic constriction was observed.

**Conclusion:** Despite the overall good voice quality, videolaryngostroboscopy showed a high presence of vocal fold lesions and supraglottic constriction during phonation.