Victor J. Boucher, Annie C. Gilbert (2009)

The physiology and acoustics of vocal fatigue I: new findings of criterion-based signs for the prevention of acquired voice disorders

Abstract

"Vocal fatigue" is associated with excessive voice use and reflects a condition that can lead to vocal-fold lesions. We present a two-part synthesis of our findings on the physiological and acoustic effects of vocal effort. In this first part, we report on the results of an experiment showing that, contrary to received views, vocal effort causes fatigue in laryngeal muscles, which can be observed via a technique of electromyography (EMG). The finding of this objective physiological sign of voice fatigue was used as a criterion in identifying related vocal changes that bear on the risk of developing lesions.

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