EXTENDED GRBAS SCALE: A COMPREHENSIVE PERCEPTUAL EVALUATION OF DYSPHONIA FOR THE ASSESSMENT OF COMMON VOICE DISORDERS AND ARTISTIC VOICE PROBLEMS.

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Abstract

Perceptual evaluation of dysphonia is a basic investigation for the assessment of common dysphonia and for artistic voice problems. The most commonly used methods for this examination are the GRBAS Scale, proposed by the Japanese Society of Logopedics and Phoniatrics in 1981 and adopted, in a basic reduced version (GRB), by the European Laryngological Society (ELS) in 2001 and the Consensus Auditory-Perceptual Evaluation of Voice (CAPE-V) proposed by the American Speech-Language and Hearing association (ASHA) in 2002. In the same year (2002) the Italian Society of Phoniatrics and Logopedics (SIFEL) introduced a Protocol for the assessment of dysphonia that follows the ELS guidelines. This includes the perceptual evaluation of dysphonia with the GRBAS Scale, added with the perceptual parameter “Instability” (“I”) proposed by Dejonckere in 1996 and other perceptual parameters similar to those contained in the CAPE-V, in order to perform a comprehensive perceptual evaluation of dysphonia. In the “Extended GRBAS Scale the parameters “Instability of the voice” (“I”, “vocal Loudness” (“L” with the direction “soft” or “loud”) and “vocal Pitch” (“P” with the direction “low” or “high”() are rated as the other parameters of the “Standard GRBAS Scale on a 4 severity degrees scale: 0 Normal, 1 Mild Alteration, 2 Moderate Alteration, 3 Severe Alteration) and not on an analog scale as in the CAPE-V. In this way this investigation can be performed by two examiners (usually a voice clinician and a speech-language pathologist) who jointly and independently rate the various perceptual parameters, then discuss with each other and come to a consensus on the degree of deviation to assign to each perceptual parameter, improving the clinical relevance of this subjective investigation. As in the Standard GRBAS Scale, when “diplophonia” is perceived a “d” is added to the score of the parameter “R”; when “vocal tremor” is perceived a “t” is added to the score of the parameter “A” or to the score of the parameter “S” (in the “Reduced” GRBAS Scale the “t” is added to the parameter “G” because the parameters “A” and “S” are not present). The “Extended GRBAS Scale also includes the evaluation of other perceptual parameters which can be usefull for the assessment of dysphonia: the “Voice Source”, the “Vocal Register”, the “Vocal Onset”, the “ Voice Resonance” and the “Fluency of Phonation”; these 5 perceptual parameters, similar to those contained in the CAPE-V, are not scored on a scale because it is not possible and they are rated in a specific way, as in the CAPE-V. The score of the perceptual parameter “G” is the same in the “Extended”, in the “Standard” and in the “Reduced” GRBAS Scale; so the score of the “global Grade of dysphonia” is the sane in every version of the GRBAS Scale. The “Extended GRBAS Scale has been used in Italy for more than 15 years in daily clinical practice and we now consider that it contains all the basic parameters for a comprehensive but easy and fast perceptual evaluation of dysphonia.

In the assessment of common voice disorders and artistic voice problems, the voice clinician can use the “Standard GRBAS Scale, the “Reduced GRBAS Scale for a basic evaluation, or the “Extended GRBAS Scale for a comprehensive perceptual evaluation of dysphonia.