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Book of Abstracts

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Edited by
Jenny Iwarsson
Stine Løvind Thorsen
Diagnostic evaluation of voice quality is usually performed on GRBA scales in habitual reading, or in normal pitch and intensity position of voice. Voice assessment has not yet focused on the dependence of voice quality modification in the basic functional change in a voice production, such as the change in the pitch, intensity and voice type (spoken vs. singing).

RBASI scales and fullness were evaluated in listening tests on recordings of 54 female patients with different type and degree of voice disorders. The spoken voice was rated from the habitual reading recordings and the words “halo” at the moderate and maximum intensity of a gradual calling task. Singing stimuli were created from the scales singing during the VRP examination at maximum intensity. The evaluation was attended by 9 evaluators (4 experienced and 5 beginners). The evaluation was carried out on numerical scales with 7 degrees. The results of the evaluation of individual voice tasks were compared by paired t-test.

The results show a very good to excellent interrater agreement (Cronbach’s alpha). In general, changes of voice quality connected with the raising of the voice intensity increased the evaluation of the fullness. The instability was most noticeable in the habitual reading. The calling in the middle intensity generally had the smallest roughness and strain. Breathiness and asthenicity were only partially reduced with increasing intensity.

The voice pitch change in the loudest dynamics was basically connected with a modification in the breathiness and asthenicity that had risen with the increasing pitch. In the middle and higher pitch, the increase in pitch was also reflected by a decrease in the fullness. When the registers changed, tension and instability increased in the higher register.

A comparison of speaking and singing voice type showed a general increase in strain and instability in singing, while in the register transition region also increased the breathiness and asthenicity, fullness decreased.

The perceptual evaluation of different voice usage, depending on the change in pitch, intensity and type of voice, showed their basic qualitative differences, which are likely to be used in the differential diagnosis of voice disorders.