Prevalence of Vocal Tract Discomfort (VTD) in healthy subjects above the age of 65 years old

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Relevance
People with voice disorders often experience discomforting feelings in the vocal tract (i.e. Vocal Tract Discomfort – VTD) 1,2, but can these sensations only occur as a direct consequence of the voice pathology? Prevalence data in Flemish elderly were gathered in order to find out whether VTD also occurs in the healthy elderly population.

Symptomatology

What is Vocal Tract Discomfort?

- Burning
- Tight
- Tickling
- Lump
- Dry
- Sore
- Irritable
- Aching

Methods

Subjects
- 271 subjects
  - Mean: 74,77 years [64,67 – 94,25]
- 116 men
  - Mean: 74,70 years [64,67 – 91,17]
- 155 women
  - Mean: 74,82 years [65,00 – 94,25]

Materials
- VTD-scale (Frequency & severity)
- Corporal Pain scale
- Voice Handicap Index (Quality of life)
- GRBASI rating (Voice quality – consensus)

Statistical analyses (α = 0,05)
- Nonparametric Mann-Whitney U
- Nonparametric Kruskal-Wallis & Bonferroni correction
- Spearman's rank correlation coefficient

Results

Prevalence

62,0% (168/271) reports at least one VTD-symptom

1. Tickling sensation – 39,1% (106/271)
2. Dryness – 33,9% (92/271)
3. Lump in the throat – 29,2% (79/271)

The more often = the more severe!

Relations

Significant Non-significant

- Gender ~ lump
- Age
- Vocal load ~ burning
- ~ tickling
- ~ dry
- ~ lump ~ irritation
- Smoking
- VHI ~ 0,440 ~ 0,421
- Interpretation Moderate Moderate
- Pain in the throat ~ 0,290 ~ 0,299
- Interpretation Weak Weak
- Reflux ~ burning ~ aching
- Having (grand-) children
- VHI ~ 0,279 ~ 0,280
- Interpretation Weak Weak

Conclusions

- VTD frequently occurs in healthy elderly subjects.
- VTD occurs less frequently in elderly (62,0%) than in younger populations (88,0%) 3.
- Teachers report increased amount of symptoms, even after retiring.
- VTD-scale adds additional important information to voice assessment protocols.