Voice Therapy for Presbyphonia
UCLA Framework

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Why Does the Patient See You?

“I don’t sound like myself.”
“No one can hear me.”
“My voice fatigues.”

Voice is Important to Quality of Life...
What Do You See?

Presbylarynges

+ VF Atrophy w/ Bowing
+ Vocal Process Prominence
+/- Paresis
+/- Pseudosulcus
Presbylarynges

*It’s MORE than Sarcopenia!*
A Closer Look...

**Males:** Membranous Vocal Fold Shortens

**Females:** Cover gets Thicker

**SLP:** Less Dense+More Edema

**ILP:** Males: Thins+Loses Contour+Deteriorates

**ILP:** Males: Elastic Fibers+Less Dense+Atrophy

**DLP:** Males: Thickens

**DLP:** Males: Collagenous Fibers More Dense

**DLP:** Males: Collagenous Fibers More Fibrotic
What do You Hear?

Presbyphonia
+ Hoarseness with >er Breathiness
+ Reduced Loudness-Poor Projection
+ Decreased Maximum Phonation Time
+ Lowered Pitch
+/- Tremor
Presbylarynges and Presbyphonia

Not All Presbylarynges and Presbyphonia are the Same.
How Many People have Presbyphonia?

US Census: 65+ Population
- 2012: 43.1 Million
- 2050: 83.7 Million Projected

Incidence of Presbyphonia in 65+
- Up to 29.1%
- 2012: Up to 13 Million Cases in US
- 2050: Up to 26 Million Cases in US

Bureau of Labor Statistics/ASHA Leader
- 2014: 135,400 SLPs (BLS)
- 2015: 7,800 SLPs who Report Expertise in Voice (ASHA Leader)
- 2024: 163,834 Projected SLPs (BLS)
Presbyphonia

There is a lot of good work to do!
Presbyphonia

Treatment Options

- Voice Therapy
- Vocal Fold Augmentation
  - Injectables
  - Implantables
  - Type I Thyroplasty
- Regenerative Medicine
Voice Therapy for Presbyphonia

Lots of Voice Therapy Programs

- SOVTx +/- Flow Resistant Tubes
- Vocal Function Exercises
- Pho-Rte
- LSVT
- LMRVTx
- Flow Phonation
- Conversation Training Therapy
Voice Therapy for Presbyphonia

Common Themes in Therapy
- Prolonged Phonation
- Phonation on Higher and Lower Pitches

Differences in Therapy
+- Vowel
+- Pitch
+- Loudness
+- Cognitive Load
Voice Therapy for Presbyphonia

Mara R. Kapsner-Smith,a,b Eric J. Hunter,a,c Kimberly Kirkham,a, Karin Cox,a and Ingo R. Titzea,d

A Randomized Controlled Trial of Two Semi-Occluded Vocal Tract Voice Therapy Protocols

JSLHR Research Article, 2015

“VFE and FRT therapy may improve voice quality of life in some individuals with dysphonia. FRT therapy was noninferior to VFE in improving voice quality of life in this study.”
Voice Therapy for Presbyphonia

*Find what works best for your patient and you!*
Voice Therapy for Presbyphonia

Another Tool for Your Tool Kit?

*Resonance Tube Phonation in Water (RTPW)*

- Physics Based
- Patient-Centric
- E-A-S-Y
Let’s Look at the Physics

Resonant Tube Phonation in Water (RTPW)
AKA: *Finnish Voice Therapy*
Patient-Centric

Pitch
- Adult Females:  G3 (196.00 Hz) - C4 (261.63 Hz)
- Adult Males:  A2 (110.00 Hz) - D#3 (155.56 Hz)

Register
- Vocal Fry-Chest-Mix-Falsetto

Loudness
- 68-76 dB as Measured at Two Feet on the Decibel App

Resonance
- Goal = Oral
- Typical Voice Patient = Laryngeal
E-A-S-Y
Presbyphonia Protocol

“Do what I do.”
“Feel.”
“Listen.”
Presbyphonia Protocol

Say ooo through a Boba straw into one inch of water: Feel cheeks flutter
- **Most Resonant Pitch**
- **Steps**
- **Steps up a Scale**
- **Glides High to Low**

Say “Who”: Feel buzz in lips
- **Most Resonant Pitch**
- **Steps**
- **Steps up a Scale**
- **Quiet to Loud**
- **Glides High to Low**
Presbyphonia Protocol

Immediately Stop Performing Your Exercises Under the Following Circumstances:

- Your voice feels fatigued or sore during or after the exercises.
- You have a respiratory infection.
- You are taking high doses of medications that increase your risk for bleeding.
Presbyphonia Protocol

Most Patients Experience an Immediate Re-Set.
Presbyphonia Protocol
Presbyphonia Before and After

4-8 Weeks to Drive Neurological Re-Programming
- *The Brain is as The Body Does*
- *Then the Brain Tells the Body What to Do!*

6-12 Weeks for Strength Building
Presbyphonia Before and After
The Bottom Line

Voice is Important to Quality of Life...

65+: Growing Demographic
65+: High Incidence of Voice Problems
SLPs: Tools to Help
Therapy: Calibrate The Therapy to the Patient
References

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