

# An Interactive Approach to Voice Treatment

Melody OuYoung, M.S., CCC-SLP

Licensed Acupuncturist

USC University Hospital

# Voice Evaluation

- 3 Key Components:

- 1) Background (medical/social), onset of vocal disturbance

- 2) Subjective data

- Clinician observations

- Questionnaires

- VHI - Voice Handicap Index  
[Patient completes form]

- CAPE-V – Consensus Auditory-Perceptual Evaluation of Voice  
[Clinician completes form]

- 3) Objective data

- Stroboscopy report

- Voice outcome measures via Visi-Pitch

## Cont. **Voice Evaluation**

- **BACKGROUND (MEDICAL/SOCIAL), ONSET OF VOCAL DISTURBANCE**
  - Illness
  - Surgeries
  - Adjuvant therapy (radiation or chemotherapy)
  - GERD, LPR
  - Asthma
  - Allergies
  - Occupation/environment, stress factors, voice usage, etc.

# Cont. Voice Evaluation

- SUBJECTIVE DATA
  - Tension site
  - Breath-speech support/coordination
  - Trial therapy

## Cont. Voice Evaluation

- OBJECTIVE DATA
  - Stroboscopy findings/ENT report
  - Voice Outcome Measures via Visi-Pitch
    - /ah/ prolongation for 6 seconds
    - RAP (Relative Average Perturbation)
    - Shimmer
    - F<sub>0</sub> (Rainbow Passage)
    - Pitch range
    - MPT (Maximum Phonation Time)

# Voice Treatment

- Techniques used have shown positive treatment outcome measures (ongoing in-house study)
  - Participants:
    - Total of 23 patients between the ages of 18 to 81 were seen at USC hospital clinic
  - Focus Groups:
    - I: 9 vocal abuse/misuse patients
    - II: 6 head & neck cancer patients
    - III: 4 neurologically involved patients
    - IV: 4 vocal trauma patients

## Cont. **Voice Treatment**

### **Overall Voice Treatment Outcome Measures:**

- 23/23 cases showed reduction in hoarseness as measured during /a/ prolongation
- 17/23 cases showed improvement in maximum phonation time
- 20/23 cases showed improvement in pitch range
- 22/23 cases were satisfied with therapy

# Some Challenges for Voice Treatment

- Poor vocal hygiene/use
- Head, neck, upper body tension
- Decreased breath support/coordination
- Improper tone focus
- Low pitch level (habitual lower than optimal)
- Vocal cord weakness (reduced adduction/vibration)
- Poor carryover of vocal techniques

# Poor Vocal Hygiene / Habits

- Self-awareness is key!
- Oral dryness
  - Frequent water intake, herbal supplement (loquat pear syrup) and acupuncture
- Frequent throat clearing
  - Behavior management
- GI Reflux
  - Diet/lifestyle modification, medications

# Head/Neck/Shoulder tension

- Relaxation exercises
- Elephant walk
- Laryngeal massage/acupressure
- Chi-Kong exercises

# Decreased Breath Support/Coordination

- Abdominal breath exercises
- Breathing control exercises
- Lower belly exercises: “ shi”, “hoo”  
exercises
- Tactile/visual feedback

# Improper Tone Focus

- Forward sounding (humming, lip trills, masking)
- Use Kazoo blowing
- Mi-Mi approach
- Resonance training
- Voice projection
- Laryngeal manipulation

# Low Pitch Level

- Pitch gliding exercises
- High vs. Low pitch exercises
- Falsetto
- Use “E” sound list
- Provide auditory/visual feedback

# Vocal Cord Weakness

- Pushing exercises
- Laryngeal lift: straw exercises, breath-hold
- Oral resonance exercises (Humming, lip trills, masking, etc.)

# Poor Carryover

- Auditory/visual training and feedback
- Recording and video taping sessions
- Use Visi-Pitch or a playback device to provide feedback
- Phone monitoring: call in to clinician

# INTERACTIVE LABS

## LEARNING OBJECTIVES:

To understand why and demonstrate how to do the following treatment techniques:

- ❑ Diaphragmatic breathing
- ❑ Elephant walk
- ❑ Laryngeal massage and manipulation
- ❑ Kazoo exercises
- ❑ Lower belly exercises “shi” and “hoo”
- ❑ Lip trills
- ❑ Whistle exercises
- ❑ Straw exercises
- ❑ Head lift

# Video Clips and Images

# Conclusion

## Keys to success

- Patient's motivation
- Clinician's guidance/expertise
- Provide auditory/visual/tactile feedback
- Provide strategies which patients can easily use in their daily life
- Positive behavior management
- Make sessions enjoyable and interesting

# Contact Information

Melody OuYoung, M.S., CCC-SLP

Manager of Speech Pathology Department

USC University Hospital

1500 San Pablo Street

Los Angeles, CA 90033

Email: [mouyoung@sbcglobal.net](mailto:mouyoung@sbcglobal.net)

(323) 442-8928