Evaluation of Chronic Cough: Experience in Academic Medicine Setting

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Evaluating Chronic Cough in Academic Center

- Skewed population of patients:
  - “Worst of Worst”
  - Given greater latitude to evaluate patients
Evaluating Chronic Cough in Academic Center

Develop an in-house multi disciplinary team

- NJC Clinical Evaluation Team
  - Pulmonary
  - Allergy/Immunology
  - ENT
  - GI
  - Speech/Language pathology

- Cross-Fertilization of ideas
Evaluation of Chronic Cough in Academic Center

Cross-Fertilization

**Basic Scientists**
- Neuro-physiologist
- Basic scientists
  - Tissue analysis
  - Cellular and Mediator evaluation

**Clinical Researchers**
- Pulmonary
- Allergy/Immunology
- ENT
- GI
- Speech/Language pathology
Evaluation of Chronic Cough in an Academic Center

Challenges:
Diagnostic Workup
Multi-disciplinary Approach
Evaluation of Chronic Cough

- History+Physical
- HRCT
- Sinus CT
- +/- ENT Consult
- Allergy immunology consult
- SPT
- PFT’s
- Bronchial Challenge
- Sputum Eos/Cx
- Nasal Eos/Cx
- Laryngoscopy
- ENO

- Impedance/pH probe/Barium Studies
- +/- GI Consult
- Motility Studies
- Gastric emptying
- Bronchoscopy (BAL/BX)
- Liecester Cough Questionnaire
- Speech Consult
- +/- Steroid studies
- Psych Assessment
Speech Therapy

• Benefits of Cough suppression techniques and throat clearing suppression
Management of Laryngeal Abuse

- **Vocal Hygiene**
  - Hydration
  - Minimize caffeine and alcohol intake
  - Quit smoking

- **Chronic Cough**
  - Cough control breathing techniques

- **Vocal Abuse/Misuse and Behavior Modification**
  - Chronic throat clearing
  - Muscle tension → Vocal strain/Dysphonia
  - Overuse
  - Inappropriate pitch/loudness

Courtesy J Berquist SLT NJH
Breathing Techniques

• **Respiratory Retraining**
  – Easy flow breathing
  – Employment of diaphragmatic involvement with breathing
  – Reduce upper body/clavicular involvement
  – Reduce tension
    • Increased tension can increase cough!
    • Discourage breath holding

• **Cough Control Breathing Technique**
  – Quick but relaxed inhale to abduct vocal folds, < 1 second
  – Pursed lip exhale to maintain abduction of vocal folds with back pressure, 2-3 seconds

• **Relaxed Throat Breathing**
  – Increased focus on relaxation/ decreased UB tension
  – Slower inhale through the nose
  – Slow, controlled exhale through slightly pursed lips
Collaboration between Community Based and Academic Researchers

- Access to funds
- Grant writing
- Statistical support
- Institutional recognition
- IRB
- Translational research possibilities

Community Based
- Broader patient base
- Greater universality
- Real world test practicality of interventions
- Increase relevance to community based clinicians

"Well, I think I've talked long enough..."