Evaluation & Treatment of the Internationally Adopted Child: Management of Cleft Lip & Palate

Handout to accompany presentation at ISHA Fall Conference
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Special Needs in China
- 70% rise in birth defects in past 10 yrs
- Top 4: heart defects, hyperdactylia, CL(P), neural tube defects
- Rise is possibly due to:
  o Environmental pollution
  o Pre-marital health checks made optional in 2003
  o Poverty / decreased access to pre-natal care
  o Increase in smoking
- Increased defects lead to increased abandonment
  o Stigma
  o High cost of medical care

Classifications of Cleft
- CLP, CLO, CPO, SMC
- Unilateral vs Bilateral
- Complete vs Incomplete

“Typical” Timeline
- NAM at 1-2 wks of age
- Lip repair at 10-15 wks of age
- Palate repair at 10-13 mos of age
- Additional interventions could include:
  o Lip / nasal / palatal revisions
  o ABG
  o Secondary surgery of palate to address VPI
  o Orthodontics
  o Orthognathic surgery

Effects of Late Palate Repair on Speech Development
- Smaller consonant inventory
- Greater use of compensatory articulation errors
- Possible increase in need for secondary surgery for speech / VPI
- Additional surgical complications for internationally adopted child:
  o Possible poor nutrition
  o Decreased access to NAM
  o Higher rate of fistula / need for revisions
  o Possible carrier of resistant bacteria

Role of the AUD
- 1-3-6 Protocol
- Palate muscles responsible for Eustachian tube function
  - Tensor vili palatini
  - Levator vili palatini
  - Inefficiency leads to poor drainage of middle ear → increased risk of OM
  - Often addressed late in internationally adopted kids, which increases risk of permanent hearing loss and speech delay
- Ongoing assessment of hearing through childhood (every 4-6 mos)

Role of the SLP
- Infancy
  - Ensure that feeding is safe and efficient
- Birth to Three
  - Language & speech intervention focus on QUANTITY
- Preschool to Elementary
  - Intervention focus on QUALITY
- Adolescence to Adulthood
  - Ongoing assessment of speech & resonance
  - May have new or returning concern for VPI due to orthognathic intervention

Common Compensatory Articulation Errors
- Glottal Stopping
- Posterior Nasal Fricative
- Pharyngeal Fricative / Affricate / Plosive
- Palatal-Dorsal Production
- “Nasal (or Oral) Sniff”

Types of Resonance
- Hypernasality
- Hyponasality
- Cul-de-Sac
- Mixed

Assessing Resonance
- Train your ear, then trust it as your most reliable tool
- Resonance is best assessed in connected speech (not single words)
- Hypernasality
  - Most perceptible on vowel sounds
  - Use cul-de-sac technique w/ vowel-loaded phrases
  - If suspect hypernasality, further assessment of VPI is warranted

VPI
- Velopharyngeal Insufficiency
- Structural / anatomical deficit
- (vs velopharyngeal incompetence which is physiological or neuromotor deficit)
- Confirmed via direct assessment
  - Videofluoroscopy
  - Nasopharyngoscopy

Compensatory vs Obligatory Errors
- Greatest task of SLP is determining what he/she can and can’t fix!
- Obligatory errors can only be addressed through surgical intervention or orthodontics
  - Dental malocclusion (Class I-III) can cause artic errors including oral distortion of fricatives / affricates or inverted /f, v/
- Phoneme-specific nasal emission (compensatory) vs intermittent audible or visible nasal air emission (obligatory AND concerning for VPI)

Speech Therapy Techniques
- Increase child’s awareness of speech mechanism and oral vs nasal airflow
- Use fading cul-de-sac technique
- Feedback is KEY
  - Auditory
  - Visual
  - Tactile
- Assess stimulability often
- Name phonemes apart from letter representation
- Focus on speech-related tasks - there is no way to “exercise” the velar muscles for speech!
- Hopeful outcomes → whether it requires surgery, speech therapy or both, our goal should be 100% typical speech!

References used in presentation (in order of appearance):


