CONSEQUENCES OF UHL

Birth and post-lingual hearing loss can greatly affect a child’s ability to succeed in school, social life and future careers. For those children with UHL, they continue to meet the natural consequences of their hearing loss in order to succeed as an adult. These natural consequences include poorer localization, a lack of binaural summation, possible auditory deprivation and greater difficulty with speech understanding, especially in background noise. These factors, when compared with peers with normal hearing, affect a child:

1) Academically
   - Children with UHL were between 20-35% more likely to fail a grade level than peers with normal hearing.
   - Further education outside the classroom was required for 12-41% of children with UHL proving that they had greater difficulty hearing and comprehending information in class compared to other children.
   - Correlation between poorer speech understanding and lower academic tests. Children with UHL who failed a grade had lower verbal IQ scores. Those with more profound UHL had significantly lower full-scale IQ scores compared to children with normal or mild UHL.

2) Socially
   - Children who had difficulty localizing and communicating in background noise tended to feel embarrassed and socially excluded by peers.
   - They were also often labeled as “slow, unintelligent, distracted, aggressive, or misbehaved.”
   - Left untreated, these consequences can continue to negatively affect future academic and social development.

3) Emotionally
   - Self-esteem, stress, and exhaustion occupy their minds and can lead to outbreaks of anger or misery. Children with UHL may even have poorer communication with family members than children with normal hearing or mild bilateral hearing loss, and 20-42% were reported to have excessively behavior issues.

CURRENT PRACTICES AND DIFFICULTIES

Despite universal newborn hearing screening, children with UHL can sometimes be misdiagnosed or not screened or not treated appropriately. Difficulties with current practices are below:

- All 50 states in the US currently have EHDI programs in place; however, only 45 states mandate a UNBHS
- Children may pass newborn hearing screenings, but acquire hearing loss due to viral or bacterial infections, syndromic disorders, and traumatic head injuries
- Sensitivity of current testing: UHL that are more mild or moderate in degree may not be detected at birth, or if the hearing loss is late-onset.
- In this case, ICHC recommends children continue to have follow-up during routine doctor’s visits to monitor any changes in hearing sensitivity.
- Amplification for UHL continues to be “medically necessary” as research shows that UHL even more profound UHL can be more difficult to manage.
- Even for a young child who does not have hearing loss, competing noise at a moderate or loud level will cause greater difficulty in speech perception when compared to children 13 years old and above.
- Physicians do not understand the developmental consequences of UHL and may minimize the need for follow-up when advising families.
- The average age a unilateral loss was identified was not until 4.7 years old, most of which were identified in a preschool or elementary school screening.
- Fewer than half of the kids had tried amplification or assistive devices as treatment.

REFERENCES