Nothing is "Mild" Regarding a Child

ost pediatric audiologists become specialists by default. The advent of newborn hearing screenings (NBHS) changed the professional canvas of audiology and made us look at infants and children in a different light. Infants began arriving on our doorsteps for diagnosis and management in alarming numbers. Not only were there a lot more than before, but they required immediate intervention.

Every day seems to hold some new dilemma. Old dilemmas, such as mild and unilateral hearing loss (UHL), have multiplied. The fact that mild and/or UHL are being under-identified through the NBHS has made finding these babies even more difficult. We traditionally weren't very good at addressing mild and unilateral hearing loss in the school-aged set. Now, what are we to do with all these babies, and how can we find them all?

Early on, our profession made two critical mistakes regarding mild and unilateral hearing losses. First, we started using the terms "mild" and/or "minimal." Second, we assumed that having one normal ear was good enough. Consequently, children with these types of losses have not received the same attention and intervention as their peers with larger losses.

The word "borderline" has been used by some to describe this degree of hearing loss, which probably causes more confusion and apathy than either of the terms "mild" or "minimal." Borderline suggests the hearing loss does not clearly belong to one or the other, that a "borderline" hearing loss is not normal and not a hearing loss. But, by definition, it is a loss, so "borderline" is the most erroneous adjective to use when describing hearing loss.

The words "mild" and/or "minimal" suggest the loss is negligible. However, any size filter will block the passage of some frequencies. The size of the filter depends on the size and location of the loss. The importance of the filter effect for children is that

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while they are developing language, they don't have the ability to fill in the language gaps based on experience. The ability to hear the nuances of all frequencies is essential for developing speech and language and is gained through experience. So maybe a better term would be "essential hearing loss" rather than "mild" or "minimal."



Unilateral hearing loss is usually interpreted in terms of the degree of the affected ear. Much less clear is how to manage it in newly identified infants and young children. We know some of these kids will do well despite a UHL, but there is no clear-cut way to know which ones. Also, as we become more diligent in referring children with hearing loss to appropriate professionals in other fields, we are finding that unilateral hearing loss can have some significant implications. Etiology for this type of loss can be the following:

- Inner ear malformation
- Labyrinthitis (viral or bacterial)
- TORCH infections
- Rubella
- Hereditary
- Meningitis
- Ossicular malformation
- Non-syndromic microtia/atresia
- Temporal bone fracture
- Waardenburg syndrome
- Goldenhar syndrome
- CMV
- Brachio-oto-renal syndrome
- Velocardiofacial syndrome
- Tumoi
- CHARGE association
- Pendred syndrome
- Ototoxic medications

Infants and children with diagnosed unilateral hearing loss should be closely monitored for progressive loss, as well as bilateral advancement. Marilyn Neault, PhD, CCC-A, references a study that showed eight out of 18 children diagnosed with UHL had abnormal bilateral CT scans.

Mild and UHL is not always easy to find. However, a closer look at existing research shows that infants and children diagnosed with these types of losses should command as much attention, awareness and advocacy as their peers with bilateral losses. We also may want to rethink what we call this type of loss; in the words of Fred Bess, PhD, "Mild is not inconsequential." \$

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