

HEARING AID FITTING
TEST DATE: September 17, 2013

HISTORY

Name: Charlie Charles

Age: 2 months

Reason for visit: hearing aid fitting.

Hearing history: Charlie presents with a recent diagnosis of a bilateral moderately severe sensorineural hearing loss and is seen today for an initial fitting with hearing aids. Charlie's hearing loss was diagnosed at this clinic on August 18, 2013; brainstem auditory evoked response (BAER) tone-pip thresholds were measured at 500, 2000, and 4000 Hz at 55, 60 and 60 dBHL in both ears, respectively. Bone conduction BAER testing demonstrated no significant air-bone gaps, consistent with a hearing loss that is sensorineural in nature in both ears. In addition, she demonstrated absent otoacoustic emissions and normal tympanograms in both ears, also consistent with a hearing loss that is sensorineural in nature. Charlie was evaluated by Dr. Jay Rubinstein at UW Medical Center Otolaryngology on August 28, 2013 and he has cleared Charlie for fitting with hearing aids.

Middle ear history: Charlie has a negative history of ear infections.

Family history of childhood hearing loss: negative

Early intervention: Charlie's family is in the process of enrolling in the Listen and Talk early intervention program.

Medical home: Charlie lives with her family in West Seattle and is followed by Dr. Sue Smith at Swedish Physician-West Seattle.

TEST RESULTS

Hearing Aid Check: The hearing aids were adjusted using the Desired Sensation Level (DSL) prescription method and real ear measures using the Verifit electroacoustic/real ear system. The target and measured values were derived after measurement of the child's real-ear-to coupler difference (RECD).

Current hearing aids: binaural Phonak Sky Q50 digital behind-the-ear hearing aids.

Settings:

- Program 1 for everyday listening using wide dynamic range compression
- Frequency compression cutoff=5.0 kHz
- Additional programs and volume control are deactivated
- Color: transparent clear

Earmolds: Charlie's earmolds were last made at her visit on August 28, 2013 and are fitting well.

- Style: full shell
- Venting: medium
- Material/color: Silicone disappear B

Manufacturer/Model	Serial #	dB SPL at eardrum	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	6000 Hz	Aided SII
Phonak Sky Q50	1010X0EMX	Right Ear							
		Target output -avg speech (6)		88		92	94		40-75
		Measured output-avg speech (6)	93	93	84	90	95	89	66
		Target output-soft speech (5)		81		84	85		30-65
Phonak Sky Q50	1010X0EMY	Left Ear							
		Target output -avg speech (6)		88		92	94		40-75
		Measured output-avg speech (6)	90	91	86	90	94	87	67
		Target output-soft speech (5)		81		84	85		30-65
		Measured output-soft speech (5)	88	87	78	84	87	82	54

PT.NO: U3336653

NAME: CHARLES, CHARLIE

DOB: 07-12-2013

UW Medicine

Pediatric Audiology, Box 357920
Center on Human Development and Disability (CHDD)
University of Washington Medical Center
Seattle, WA 98195

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Hearing Aid Evaluation/Orientation

Charlie was fit with Phonak Sky Q50 digital behind-the-ear hearing aids. Her parents, Chuck and Cheryl, were instructed in the care, cleaning, and use of the hearing aids, earmolds, and batteries. They were advised to have Charlie wear the aids for all of her awake hours. They were given strategies to help with feedback, retention, and possible child removal of the devices. In addition, they were advised to note if she shows adverse reactions to sounds with the hearing aids. The hearing aid program selection and volume wheel have been deactivated.

ASSESSMENT

Hearing loss: Previous testing has demonstrated that Charlie has a bilateral moderately severe sensorineural hearing loss.

Hearing aids: Charlie was fit with binaural hearing aids today (Phonak Sky Q50). Coupler measurements of the hearing aids indicate that current settings achieve target DSL values for gain for soft and average speech and aided SII values fall within the expected range for the degree of hearing loss.

RECOMMENDATIONS

Hearing loss:

1. It is recommended that Charlie's hearing be monitored closely with audiological evaluations every 3 months until her hearing has been determined to be stable. Charlie will return for a BAER evaluation in November 2013. Subsequent evaluations will be conducted with developmentally appropriate behavioral hearing evaluations.
2. The etiology of Charlie's hearing loss is unknown at this time and her parents are advised that they could pursue additional testing in the future including a CT scan of the ear, testing for congenital infections, and genetic testing. For these evaluations, she is referred to Seattle Children's Otolaryngology Clinic (206-987-2105).

Hearing Aids:

3. It is recommended that Charlie wear her hearing aids full time when she is awake. Her parents are advised to not have her wear her hearing aids during bath time and use in the car seat may be challenging.
4. It is recommended that Charlie's parents check the hearing aid batteries and clean the earmolds daily and store in a drying kit nightly. They are also encouraged to complete a weekly listening check.
5. It is recommended that Charlie's hearing aids and earmolds be monitored closely at her follow-up visits. Re-makes of earmolds will be made at these visits as needed. Electroacoustic measures in conjunction with real ear measures will be used to monitor the output of the hearing aids. In addition, outcome measures using both aided speech testing and questionnaires will be used to monitor her access to sound with hearing aids.

Early Intervention

4. It is recommended that Charlie's family enroll in an early intervention program to support her hearing aid use and development of communication skills through parent education and support. Charlie's family is in the process of enrolling in Listen and Talk.

Lisa Mancl, M.S., CCC-A
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Jack Jones
Graduate Audiology Student Clinician

cc: parents (Chuck and Cheryl Charles)
primary care physician (Dr. Sue Smith at Swedish-West Seattle)
otolaryngologist (Dr. Rubinstein @ UWMC Otolaryngology)
early intervention (Listen and Talk)

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