



Case Study:

Team Helps Child With Hearing Loss Develop Language Skills

SIG 9: Hearing and Hearing Disorders in Childhood

Summary

An interprofessional practice (IPP) team worked together to assess hearing loss and language skills in a 2-year-old child. The team recommended a cochlear implant and a plan of therapy for language development and listening skills. As a result, the boy's expressive vocabulary began showing steady growth.

Patient Info



DANNY
2-YEAR OLD

Current Diagnosis:

Bilateral Severe-Profound SNHL

Meet The Team



Audiologist



ENT/otologist



SLP
(hospital-based
and on the CI team)



Local SLP
(part of an early
intervention program)



Spanish language
interpreter



Occupational
therapist
(OT)



Patient



Family

Continue for more

Background

Two-year-old Danny was recently identified with bilateral, severe-to-profound sensorineural hearing loss as a result of cytomegalovirus (CMV). Records indicate that Danny passed his newborn hearing screening in the left ear but not in the right ear. Danny's family reported that they were unaware of his hearing loss, so they did not follow up after the newborn hearing screening.

At the time that the IPP team was assembled, Danny communicated his needs and wants by pointing and vocalizing. Family members reported that he was using some single Spanish words to communicate. Danny's family spoke Spanish at home and used a Spanish language interpreter in educational and health care settings. His parents were concerned about Danny's ability to eat independently and his aversion to particular textures.

Danny had recently been fit for hearing aids and showed increased awareness to sound. He had an appointment with an otologist to assess candidacy for a cochlear implant (CI).

How They Collaborated

Each member of the IPP team met with Danny to assess his hearing and language skills. Afterwards, the team met to share their findings.

The audiologist evaluated Danny's hearing and reported that his hearing aid check and fit were unremarkable. The ENT/otologist deemed that Danny was a good candidate for a CI and referred the family to a CI center for further evaluation. Danny's family expressed concern about missing work for frequent appointments as well as travel to and from the appointments.

The SLP conducted a speech, language, and auditory skill assessment, which showed that Danny had severe language delays. Danny's vocabulary was moderately delayed, but his social communication was normal. During the assessment, via an interpreter, Danny's parents reported that they were unable to understand most of what Danny said. Most of their communication was through pointing and gestures. They also reported that Danny loved playing with cars and trucks and imitated two- and three-step sequences from home routines.

The OT evaluated Danny's sensory skills and found that Danny's aversions to foods and textures were typical for his age. His family was counseled to continue Danny's exposure to new foods and reevaluate at transition to preschool.

During the CI candidacy timeframe, Danny's family traveled to the CI center to meet with the hospital-based SLP once a month. Also, the local SLP saw Danny and his family once a week to work on the language and listening goals outlined by the IPP team. In addition, the local SLP connected Danny's family with other Spanish-speaking families who also have children who are deaf and/or hard of hearing (DHH). The IPP team stressed that Danny needed to use his hearing aids full time and monitor how the hearing technology works in different environments (i.e., home, noisy situations, clinic, car).

After reviewing the evaluation results, the IPP team recommended that Danny receive a CI. After the implant's activation, Danny continued to receive therapy for language development and listening skills. The team emphasized that Danny's family needed to expose him to verbal language as he learned to use his CI.

Outcome

The local SLP shared data with the team about Danny's development after receiving the implant. This data showed Danny's expressive vocabulary had grown steadily, and he had begun to communicate using two- and three-word utterances.

Ongoing Collaboration

The IPP team planned monthly calls with team members and Danny's family to coordinate ongoing care. During these calls, the team and the family will continue to share what is working and what needs adjustment with Danny's CI.

Case Rubric:

Team Helps Child With Hearing Loss Develop Language Skills

SIG 9: Hearing and Hearing Disorders in Childhood

Patient Info



DANNY
2-YEAR OLD

Current Diagnosis:
Bilateral Severe-Pro-
found SNHL

Meet The Team



Audiologist



ENT/otologist



SLP
(hospital-based
and on the CI team)



Local SLP
(part of an early
intervention program)



**Spanish language
interpreter**



**Occupational
therapist
(OT)**



Patient



Family

Continue for more [↓](#)

History and Concerns

(Share key information gathered from team)

Danny is a 2-year-old child recently identified with a bilateral, severe-to-profound sensorineural hearing loss. The cause of the hearing loss was determined to be secondary to asymptomatic cytomegalovirus (CMV). Records indicate that **Danny** passed his newborn hearing screening in the left ear but not in the right ear. Follow-up did not occur after the initial newborn hearing screening because **Danny's** family reported that they were unaware of the issue. Currently, Danny communicates his needs and wants by pointing and vocalizing. Family members report that he is using some single Spanish words to communicate. He recently was fit for hearing aids (bilaterally), and shows increased awareness to sound in his environment and to his name. Danny has an appointment with an otologist in the immediate future to assess candidacy for a cochlear implant (CI). His family speaks Spanish as their primary language in the home; therefore, a Spanish language interpreter provides translation in educational and health care settings. His parents are concerned about Danny's ability to eat independently and his aversion to particular textures. Transportation and resources are identified challenges for Danny's family.

Assessment Plan

(Determine roles/responsibilities for evaluation)

The team acknowledged that Danny's case presents a unique IPP situation in that he has two teams: educational and medical (Danny and his family are part of both teams). Each team needs to communicate and collaborate within their team and work together across teams. Team members concur about the importance of mutual trust, respect, and support—both within teams and across teams.

The team meets to discuss and finalize the areas of assessment and mutually agree on their roles in assessment:



Family – Report on strengths and concerns; participate in developing goals and plans for Danny's communication and self-help skills; request information about community resources



Audiologist – Evaluate hearing; fit appropriate technology; counsel family on communication options; stress the importance of access to communication

Assessment Plan

(Determine roles/responsibilities for evaluation)



ENT/Otologist – Provide information on structure and function of auditory system; counsel on physiological candidacy for CI



SLP (hospital-based and on CI team) – Conduct speech, language, and auditory skill assessment; set goals for communication outcomes



Local SLP/Early Interventionist – Assess functional communication strategies in the home and in family routines



Spanish Language Interpreter – Facilitate communication between family and team members to overcome language and cultural barriers



OT – Evaluate sensory and self-help skills.

Assessment Results

(Summarize key diagnostic results)

The team meets to share assessment results with one another.



Audiologist – The audiologist reports that the hearing aid check and fit are unremarkable.



ENT – Danny is deemed a good candidate for a CI and is referred to a CI center for further evaluation. In addition, the parents express concerns to the ENT about traveling back and forth to the CI center on a frequent basis and about missing work for the appointments if Danny does get a CI.



SLP – Danny’s communication abilities are evaluated using criterion-referenced observational checklists and conducting an interview with parents through a Spanish-speaking interpreter. Danny’s parents report that they are unable to understand most of what Danny says and that he points or gestures to get what he wants. They also report that, at home, Danny loves playing with cars and trucks and imitates two- and three-step sequences from home routines (e.g., fixing a piece of furniture or “play” cooking a meal). The SLP determines that Danny shows severe receptive and expressive language delays, particularly in the areas of syntactic and morphological development. Danny’s vocabulary is moderately delayed. Social communication is within normal limits.

Assessment Results

(Summarize key diagnostic results)



OT - Danny's aversions to foods and textures are within normal limits for his age; the family is counseled to continue Danny's exposure to new foods and to monitor weight gains with the pediatrician. If no concerns arise, Danny should reevaluate at transition to preschool.

IPP Treatment Plan

(Discuss, reflect, and modify recommendations to develop a coordinated plan)



SLP - During the CI candidacy timeframe, Danny's family will travel to the CI center with the SLP once a month. In the meantime, the local SLP and/or early interventionist will see Danny and his family once a week to implement language and listening goals outlined by the team. This strategy will ensure similar goals for vocabulary and for responses to sounds and speech. The local SLP/early interventionist will assist the family in implementing language stimulation activities during daily routines at home (with support from the Spanish language interpreter).

The SLP/early interventionist shares resources such as the local Hands and Voices chapter to connect Danny's family with other families and to connect Danny with other Spanish-speaking children who are deaf and/or hard of hearing (DHH).



Audiologist - Coordination is planned across teams and between all interventionists, family members, and the audiologist to establish full-time hearing aid use by Danny and to monitor how hearing technology is working in different environments (i.e., home, noisy situations, clinic, car). Monthly telehealth phone calls are arranged for team members to connect with the family.



OT - All team members agree to be mindful of the family's initial concerns regarding Danny's fine motor skills and sensory issues. If, at any time, there is additional concern in this area, the team will consult with the OT.

<p>IPP Treatment Plan (Discuss, reflect, and modify recommendations to develop a coordinated plan)</p>	<p>Ultimately, it is recommended that Danny receive a CI, and Danny’s family move forward with this recommendation. The implant is activated, and the plan of therapy for language development/listening skills continues—with emphasis on ensuring that Danny’s family understands the importance of exposing him to verbal language.</p> <p>After the initial adjustment period with a focus on sound awareness, the local SLP/early interventionist share data with the family and with other IPP team members. The performance data demonstrates that Danny’s expressive vocabulary is showing steady growth. Also, he is beginning to communicate using two- and three-word utterances. He continues to pair gestures with verbal utterances.</p> <p>The team determines that the SLP at the CI center and the local SLP/early interventionist will serve as the links between the two teams (with others consulted as needed). Monthly calls are planned with team members and family to coordinate ongoing care. Each team and the family share regarding what is working and what is not working.</p>
<p>Treatment Outcomes (Discuss results of treatment)</p>	<p>The performance data demonstrates that Danny’s expressive vocabulary is showing steady growth. Also, he is beginning to communicate using two- and three-word utterances. He continues to pair gestures with verbal utterances.</p>
<p>Team Follow-Up (Determine meetings & communication plan)</p>	<p>The team determines that the SLP at the CI center and the local SLP/early interventionist will serve as the links between the two teams (with others consulted as needed). Monthly calls are planned with team members and family to coordinate ongoing care. Each team and the family share regarding what is working and what is not working.</p>

Acknowledgement

ASHA extends its gratitude to the subject matter expert(s) who were involved in the development of the original version of this IPP case:

Kristina M. Blaiser, PhD, CCC-SLP

Donna Smiley, PhD, CCC-A

Special Interest Group 9 (SIG 9): Hearing and Hearing Disorders in Childhood

Citations

American Speech-Language-Hearing Association. (n.d.). Team helps child with hearing loss develop language skills. <https://www.asha.org/practice/ipe-ipp/case-studies/case-study-14/>

Find more case studies at <https://www.asha.org/practice/ipe-ipp/case-studies/>.