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Clinical Management of Bilingual Families and Children with Cochlear Implants

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In this issue of *Loud and Clear*, issues related to the clinical management of children with a cochlear implant (CI) who are exposed to more than one spoken language will be explored. We will describe three groups of bilingual children with CIs and will review encouraging research data regarding some of these children. We provide clinically based guidelines for children who appear to be good candidates for learning multiple languages following implantation. We also discuss the real challenges English-speaking clinicians often face when implanting children from families who speak little or no English and describe an early intervention model for such families.

Concerns for Bilingualism in Children With Cochlear Implants. Achieving oral language competence in one language remains a formidable challenge for many profoundly deaf children because deafness denies developing children adequate exposure to the complex phonetic and suprasegmental patterns of the spoken language code. In addition, deafness severely restricts their access to the richest source of spoken language learning that is available to children with normal hearing (NH): the spontaneous language models of fluent speakers that occur around them all day long. The majority of this ambient language is learned incidentally. That is it is not specifically addressed to NH children, nor do users attempt to teach its specifics. Rather, parents of NH children talk to, with, and around their children in meaningful contexts as the children evolve into highly competent, native speakers of the language.

The capacity for language development is so strong in the early years of childhood that NH children from multilingual homes can master two, three, or more

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Clinical Management of Bilingual Children continued

languages incidentally, with no didactic teaching. Recent research indicates that linguistic milestones occur at about the same rate and have the same characteristics in NH bilingual and monolingual children.[1] Even so, clinicians, particularly those in the United States where multilingualism is less common than in other parts of the world, have often viewed second-language learning with skepticism, based on concerns that it would interfere with the acquisition of the first language or actually cause a language impairment.

Considering the factors above, it is understandable that clinicians in the past were reluctant to recommend bilingual language environments for children with a CI. However, in recent years, several factors make multilingual proficiency a more attainable goal for CI children than was previously thought. A CI offers a profoundly deaf child broader access than do hearing aids to the fine phonetic features and suprasegmental patterns of spoken language. New, state-of-the-art speech processing replicates the essential components of language to a high degree of resolution that was previously impossible. In addition, a CI allows for considerable—although not perfect—incidental, natural language learning, including the overhearing of conversations among native language users. ***Such access to incidental language is critical if a child is to learn more than one spoken language via a CI.***

Finally, children are now receiving CIs at very early ages, during the optimal language-learning time. All of these factors point to bilingual spoken-language proficiency as a goal to at least be considered for some children with CIs.

Differences of Culture, Not Just Language. As the number of CI children from multilingual homes increases, remember that language is a component of the larger issues of culture. Cultures differ widely in their features, including:

- Social customs
- Communication styles
- Food and eating rituals
- Music
- Roles of parents, grandparents, and extended family
- A culture's view of childhood
- Gender roles
- Attitudes toward disabilities.

When we interact with families who use different languages, we are also dealing with different cultures. These cultural mores and attitudes have a direct impact on communication and the ways clinicians counsel parents, conduct intervention, and interact with other members of the child's family. Clinicians who deal with this population require sensitivity to the intricate relationship between language and culture.

Three Groups of Bilingual Children With Cochlear Implants

For purposes of clinical management, we divide bilingual children with CIs and their families into three broad groups:

1. **ML or multilingual families**—parents speak English and another language fluently.
2. **ENL or English as a new language**—parents are just beginning to learn English or may have no English proficiency. Another language is spoken in the home by the family. In almost all cases, the child with a CI is now or will eventually be educated in English at school. (The designation ENL, preferred by some, is used here, but is synonymous with the term *English as a Second Language or ESL*.)
3. **EXF or extended family**—includes family members, such as grandparents who may speak another language and come from a unique cultural background, but a second language is not spoken in the CI child's home. The parents, however, wish to expose the child with a CI, just as they would a NH child, to elements of a cultural identity that is part of their heritage.

GROUP 1
Children From Multilingual Families (ML)

These children appear to have the most positive outcomes in their learning of multiple languages, in spite of early onset deafness. Children in this group come from homes where parents speak English and a second language. Thus, children with implants from such homes are exposed to fluent and sophisticated models of two languages and often attend schools, social events, and houses of worship where the second language is spoken fluently. Recent published reports have yielded encouraging outcomes in both languages for children in this subgroup. Most of these reports, while impressive, have been case studies of single children with a CI[2,3,4] or used informal assessment tools.[5]

In a series of investigations, the language acquisition in a group of 13 ML children with CIs was followed over a period of years, with formal assessments in both English and the second language. Using standardized English test instruments normed on children with NH, (the Oral and Written Language Scales, OWLS, or Reynell Developmental Language Scales) 11 of the 13 children attained spoken English skills that were within the average range relative to NH children.[6,7] This is a remarkable finding in and of itself and represents extremely high competence in language ability. In addition, when the second language proficiency of these subjects was evaluated, using a parent interview/observation tool, the SOLOM,[8] the children showed impressive, though varied levels of achievement based largely on the age of the child and years of exposure to the second language. It should be noted that the children in this series of studies were all implanted early (usually before age two), had excellent speech perception scores, and no other significant disabilities.

Exposure to Rich and Complex Models by a Fluent Speaker. The impressive results seen in some ML children are likely dependent on a number of factors, but the most important one appears to be this: successful ML children were exposed to complex and natural models of languages by speakers fluent in those languages. The children, via the implant, heard native speakers use languages with appropriate emotional correlates, in meaningful contexts, over a long period of time. In essence, these are the same characteristics that must be present for a NH child to become bilingual. In every case, a CI child needs this natural, complex, and rich exposure to master a spoken language, whether it's one language or three.

Parents of children from ML homes are faced with even more decisions than the average family during the period after initial diagnosis of deafness, because like it or not, they have more choices. Dr. Luanna Shibuya shared her reflections on the language-learning decisions her family made for their two children with cochlear implants.[9] Luanna is fully bilingual in English and Spanish; her husband, Dr. Peter Shibuya speaks only English. With their first child who has normal hearing, Peter spoke English and Luanna Spanish in the home. This was their plan for their second child who was diagnosed as profoundly deaf at 12 months of age and received a CI at 17 months. Although some professionals advised the family to speak only English in the home, the

Table 1

Factors Supporting Bilingual Learning for CI Child in a Home Where Parents Are Multilingual.

- Early age at implantation, especially before age 2
- Excellent speech perception skills with CI
- Absence of additional disabilities
- Language learning ability for anchor language appears intact
- Parent involvement and motivation for ML learning high
- Child exposed to rich and complex models of both languages
- Opportunities to use languages in meaningful contexts with native speakers
- All things being equal: the earlier the better

Table 2

Possible Contraindications for Bilingual Learning for a CI Child in a Home Where Parents Are Multilingual.

- Late age of identification of hearing loss/intervention
- Late age at CI (age four or later) with limited auditory development pre-CI
- Poorer-than-average speech perception skills with CI
- Presence of additional disability
- Evidence of struggle to acquire anchor language
- Clinical Red Flags for slow auditory progress post-CI
- Family commitment for multi-language learning lacking
- Other concerns raised by experienced clinicians

parents continued their bilingual language use, as they had with their first child. Luanna Shibuya explained, "Language isn't just words. When a well-meaning professional told me not to use Spanish with my child, (s)he was telling me not to give my child a part of who I am."

When the family's third child was diagnosed with deafness at birth and received a CI around one year of age, the parents persisted in their bilingual language use at home. Several years later, all three children are fully bilingual, although according to Luanna, there have been plateaus in language, especially expressive language, along the way. Rhoades[10] also describes such findings in bilingual learners. Luanna cautions other parents not to panic at these plateaus, but to provide additional support as the child's developing cognitive system works to sort out and master information. Some families find that providing a sound cue, such as the first sound or syllable in the word will help children remember the vocabulary they are searching for. In the case of the Shibuya family, they provided sign support to the youngest child when he knew a word in Spanish but was struggling to recall it. Such support allowed him to retrieve stored lexical information.

Recall that these ML children represent only a small percentage of the total children with implants who come from multi-language backgrounds. Thus, the very encouraging results in language acquisition seen in this group cannot be generalized at this point in time to the next group of children, ENL children whose parents are new learners of English or speak no English at all. However, it is important to study and document high-functioning ML children because they indicate what the upper levels of achievement are for certain implanted children and provide a vision of what is possible. In addition, their results provide compelling evidence that state-of-the-art cochlear implants 1) are able to transmit the subtle phonetic and suprasegmental cues of spoken language and 2) provide access to incidental, ambient language well enough to allow for multi-language learning, at least in some children born profoundly deaf. This is an outcome few would have predicted 10 years ago.

Bilingual Learning not an Automatic Recommendation in ML Homes. In spite of the encouraging outcomes noted above, not all children with CIs from ML homes are considered good candidates for learning multiple languages in the first years of life. In my practice, I evaluate children from such environments and may or may not recommend that the family utilize multiple languages in the home—rather, I may suggest that they concentrate, at least for the time being, on one single language, usually English. This is consistent with Rhoades report[10] that successful bilingual children with CIs must have a strong "anchor language."

For example, a child in my practice, DL, has parents who both speak English and Spanish fluently, the mother having Spanish and the father

English as their native tongues. Ideally, they would like to speak both languages in the home so that their child becomes bilingual. Due to unusual circumstances that led to his spending his early years of life in another county, their son has an unusual history of very late identification of profound hearing loss at age three, with no intervention until age five, and a CI shortly after that. As expected, he is struggling to master one spoken language (we are supporting this with sign) and so, for the time being, the family is concentrating on English only with him. However, I have encouraged them to use some of the techniques found under the EXF section, so that he does, in fact, have cultural, musical, and culinary exposure to his mother's native language. Over time, if spoken English becomes a proficient anchor language for this boy, the parents will also introduce Spanish.

> *"It is important to study and document high-functioning multilingual (ML) children with CIs because they indicate what the upper levels of achievement are for certain implanted children and provide a vision of what is possible."*

The factors that appear to bode well for a child in an ML environment learning multiple spoken languages are shown in Table 1. These factors are based both on research findings[6,7] and clinical experience. They include: implantation at an early age, most often before age two; good speech perception skills with their CI (This is a critically important factor—if one cannot perceive the phonetic and suprasegmental features of a language, the chances of mastering it are remote); absence of additional disabilities (such as cognitive impairment, autism spectrum, severe oral motor difficulties (dyspraxia) or working memory deficits;[11] active parent involvement and strong parent motivation for multilingual proficiency; no evidence of a language-learning disability in English or the anchor language; opportunities for natural exposure to rich and complex models of the second language; and opportunities to use the second language in meaningful situations with native speakers. Theoretically, if these factors are in place, the earlier the child with a CI is exposed to the second language, the better.

On the other hand, there are some children in the ML group whose parents I would counsel against using multiple languages, at least for the time being. These would be children who present with some or all of the following characteristics, as noted in Table 2: Late age of identification and/or intervention; late age at implantation (age four or older); less than excellent speech perception skills with the cochlear implant; partial insertion of the electrode; child already struggling to learn one language; limited or difficult family support for home carry-over of language goals; presence of additional disability (such as autism spectrum disorder, cognitive impairment, severe dyspraxia, working memory deficits); and any finding that suggests to the clinician that this child is not progressing at least at an average rate in auditory skills.

To monitor the latter, clinicians may consult *Clinical Red Flags for Slow Progress in Children with Cochlear Implants*[12] to determine if the child's auditory development is slower than expected for his or her age and pre-implant characteristics. Recall that in such cases, ML parents have a choice of fluent languages to speak to their child. My suggestion for "at risk" children in the ML group, as described earlier in the case of DL, is typically to concentrate first on English only. Our goal is to develop a strong anchor language, and then consider more systematic exposure to the second language if the child shows adequate progress.

GROUP 2
Children From ENL Families (ENL)

This represents the largest group of children who are presenting for cochlear implantation. In these families, the parents have limited or no proficiency in English and, therefore, speak another language fluently in their home. These families present a very different picture than that described for the previous ML group. With ENL families, there are challenges to the CI team even beginning with the candidacy period, often because parents are often unable to fully communicate their wants and needs to team members and because team members may be unsure about the family's level of understanding regarding the risks and benefits of the CI. We might consider

that the greatest risk in these cases is the child's lack of exposure to English at home.

In fact, their greatest disadvantages are these: First, ENL parents are severely limited in their ability to aggressively navigate the medical and educational systems, and thus to serve as informed advocates for their children due to formidable language barriers. Conversely, these systems are severely limited in their ability to deal with ENL families because of lack of qualified personnel, familiarity with cultural differences, and availability of interpreters, among other things. Second is that ENL parents are usually not taught the strategies and modeling techniques that would stimulate their child's communication development ***in the parents' first language***. Admittedly, teaching ENL parents these techniques is a challenging task for most monolingual, English-speaking clinicians, but it can be and is being accomplished with increasing frequency.

The clinical management of children from ENL families is clearly complex and requires a concerted commitment on the part of the CI team. At this time, there are no published studies reporting group performance outcomes on ENL children with CIs, although clinical experience and reports from many professionals suggest that these children typically lag behind their CI peers in their auditory, speech, and language acquisition, unless ENL parents can learn to be excellent language "teachers" to their CI children, in their native language. It is imperative that clinicians explore ways to deal more effectively with this group of patients whose numbers are expected to increase in the future. One obvious goal is to increase the efforts of our professional organizations to recruit and train multilingual professionals into the field of CIs.

> *"Communication between a parent and a young child is an intimate and highly emotional exchange and is a central part of how bonding is solidified."*

The full range of candidacy issues for ENL families is beyond the scope of this article, although it is widely acknowledged that a parent's English language proficiency by itself is not considered a selection criterion for a deaf child. On the other hand, family support is still considered an essential component of successful implantation for ENL children, perhaps even more critical than it is for other CI candidates. As always, the CI team must ensure that an ENL family has appropriate expectations from the implant, can secure the child's full-time use of the device, is comfortable with and able to trouble-shoot the equipment, and can learn home carry-over of speech, auditory, and language goals in their native language. In fact, the latter is absolutely essential for ENL families.

For ENL parents with limited English ability, ethical considerations require that a qualified interpreter be present during pre-implant candidacy discussions to ensure that the family has reasonable understanding of and expectations for the implant and to translate parent questions and concerns posed to clinicians. In the interest of full disclosure, I explain to ENL parents that their child's progress post-implant is at risk of being slower than that of monolingual children. The team should also advise the family, just as they do native English-speaking families, that the family plays the most important role in their child's success with the implant and that they will be expected to learn language stimulation techniques to use at home *in their first language*. ***Parents who speak limited English should not be advised to speak English to their deaf child as these parents will be unable to provide rich, natural, and intelligible models of language in English.***[13]

It is particularly important to understand the damaging implications of suggesting that parents speak a language in which they have limited proficiency, in light of evidence from research studies such as those of Hart and Risley.[14] Their compelling findings showed that the size of a NH child's vocabulary correlated most closely to one factor: the number of utterances the parents spoke to the child during the day. The more verbal utterances a parent used throughout the day, the stronger the child's language skills. These landmark studies found that, "Children who aren't engaged in rich language interactions with their parents are going to have low levels of vocabulary and conceptual development, and this will affect their later reading and academic achievement."

This robust conclusion has direct implications for ENL families. If they are told to speak a language in which they have limited proficiency (such as English), the number of

utterances ENL parents produce will be reduced and the quality impoverished. Such parents will be unable to provide natural, fluent models of the prosody and intonation that characterize that language. Parent-child therapy time should be spent modeling techniques in English, with the parents then replicating the techniques in their first language. This tag-team approach is covered later in this article and summarized in Table 4.

Creativity and flexibility are required when working with ENL families. In some cases, several generations of family members live in the same household, demonstrating varying degrees of English proficiency. One of the first steps recommended to clinicians is to administer the Bilingual Family Interview (BIFI) shown in Table 3.[15] The interview yields information about comprehension, expression and reading proficiency in English and in the second language for each adult living in the home, which may include extended family members.

If ENL parents have a better understanding of written than spoken English, or have family members who read English, clinicians should provide written notes from meetings and therapy sessions. The BIFI has been translated into other languages, including French for which it was used recently in a research study.[16]

To contact ENL families by telephone, clinics may subscribe to a live-voice telephone interpreter service, such as AT&T Language Line (www.att.com) or Language Line Services (www.languageline.com) (877) 886-3885. In addition, the language line may be used to have a live-voice interpreter who is present when clinicians meet with families and are unable to locate an interpreter. A request is made in advance for an interpreter of a specific language, and the meeting is conducted with the interpreter on speaker phone, who translates everything that is said. Although this is less than ideal, it has proven invaluable in some cases where no other solution could be found to language barriers, particularly for families who speak a language that is not well-represented in a particular community.

Families often have cultural customs and taboos related to communication to which clinicians should be sensitive.[10] At the same time, the needs of their deaf child may require flexibility on the part of the parents. If the clinician's suggestions are contrary to cultural norms, such as the mother using a strong speaking voice or the child using direct eye contact, the clinician may explain the importance of these behaviors at the earliest stages of language use, noting that, once a solid foundation for language is established, the child will have the skills and flexibility to adapt to different cultural expectations.

The Tag-Team Approach to Parent-Child Intervention for ENL Families. For ENL families who do not use English with their child, much value can still come out of parent-child intervention sessions, provided that family members are present during every session. The clinician's job in such cases is to conduct a spoken language lesson that could be replicated easily in the home,[17,18] with the clinician and parent tag-teaming by presenting the same activity in English, then in the parent's native language. This approach requires the clinician to identify one or two important techniques each session that the parents should use when interacting with their child in their native tongue and to model these clearly and repeatedly during the lesson (see Table 4). Desired skills to model include: using a strong but natural speaking voice, making eye contact, acoustic highlighting techniques, calling the child's name to get his attention, staying at the child's ear level, ensuring a quiet environment, and providing additional cues for comprehension, just to name a few.[19]

These skills should be modeled so frequently during the session that, although the clinician's words may not be understood by the parent, the message is ***transparent***, and the parent is highly praised when using the targeted skill. The clinician models in English, then invites the parents to do the same procedure in their language. Without knowing the second language, the clinician still is able to observe the parents' interaction style and to give feedback. The value of this approach, though unfamiliar to most clinicians, is supported by encouraging preliminary reports. These reports suggest that intervention in one language may positively influence skills in the other language, at least in the phonology/articulation domain.[20]

Compliments and praise transcend language barriers, and ENL parents need encouragement and validation for their efforts. Clinicians have noted that simple homework activities, particularly those that the family can practice both in their native language and in English, are very important for fostering progress in ENL families.[21]

Bilingual Family Interview (BIFI)*

Table 3

Amy McConkey Robbins, MS, CCC-Sp

Examiner to Parents: Please understand that the use of a non-English language is not, in and of itself, a contraindication for implantation. However, it is critical that our team have a full and honest view of your child's home language environment. This will allow us to better serve your family.

Instructions: Complete the information below.

1. Understanding ability (not speaking) of _____(second language) for all persons who live in your home.

Relationship	Name	No Ability	Understands words or phrases	Understands some conversation with errors	Understands most conversation	Full Comprehension
Mother						
Father						
(Other)						
(Other)						

2. The speaking ability in _____ (second language) for all persons who live in your home.

Relationship	Name	No Ability	Speaks words or phrases	Speaks in conversation with errors	Converses with few errors	Native Speaker
Mother						
Father						
(Other)						
(Other)						

3. The English understanding ability (not speaking) for all persons who live in your home.

Relationship	Name	No Ability	Understands words or phrases	Understands some conversation with errors	Understands most conversation	Full Comprehension
Mother						
Father						
(Other)						
(Other)						

4. The speaking ability in English for all persons who live in your home.

Relationship	Name	No Ability	Speaks words or phrases	Speaks in conversation with errors	Converses with few errors	Native Speaker
Mother						
Father						
(Other)						
(Other)						

5. How many social, cultural, or religious opportunities does your child have, outside his/her home, to hear or speak:

English:	None ☐	Few ☐	Some ☐	Many ☐	Daily ☐
(Second Language)	None ☐	Few ☐	Some ☐	Many ☐	Daily ☐

6. Please describe these social, cultural, or religious opportunities:

_____

_____

_____

7. List the person in your home who is able to read and write:

In (dominant language):		**In English:**	
Names	Relationship to child	Names	Relationship to child

8. Our team wishes to be sensitive to any cultural traditions that may affect communication (e.g., eye contact, loudness of voice, touching or other physical contact, head or face covering, etc.) Please share these with us:

_____

_____

_____

A good resource for printed words that can be reproduced in game formats in English, French, and Spanish is the website: www.teachingmadeeasier.com.

Advanced Bionics also offers the Listening Room online at www.HearingJourney.com, where clinicians and parents may find activities suitable for use in therapy or at home in the parent's native language. The John Tracy Clinic (www.jtc.org) provides their correspondence course to families in numerous foreign languages, at no charge. Some ENL families have considered the correspondence lessons to be their lifeline because of direct communication in their own language. See Appendix A for additional resources.

The value of music as a way to communicate with the child and the ENL parent cannot be overstated. Clinicians may model nursery rhymes, songs, finger plays and children's dances (such as "Ring Around the Rosie," or "Where is Thumbkin?") in English, then invite the parents to do the same in their language. Songs and dances are part of the cultural heritage of families and are replete with salient suprasegmental cues.

The Value of Parent English Proficiency. As noted earlier, children from ENL families are at a disadvantage for learning, partially because their parents are less able to advocate for them in English within the educational and healthcare systems. It is appropriate to encourage ENL parents to learn English as soon as possible, even if they do not speak it at home, as a tool to advocate on behalf of their child. I have worked with some ENL families who became quite proficient in English over time, considering it a gift to their child because the parents could now communicate directly with the child's teachers, physicians, and audiologists.

Even so, the families continued to use their native language in the home with their child, and I supported that decision. One mother told me, "I can speak some English now, but I can't use it at home with Sophia. I don't feel I'm connecting with her when I speak English. Romanian is the language that makes me feel connected to my child. It is the language of my heart." Communication between a parent and a young child is an intimate and highly emotional exchange and is a central part of how bonding is solidified. Anything that interferes with the naturalness of the exchange may be a hindrance to communication and to parent-child bonding.

My own clinical experience suggests that a therapist will spend at least twice the amount of time providing service to a family in the ENL category than to an English speaking family (that is, when the family and therapist do not share a common language). This is important for clinicians and administrators to recognize, because these additional hours are generally not reimbursable, but involve such things as phone calls, making copies of documents, interacting with relatives who accompany the family, and so on.

Use of an Interpreter. Some clinicians who work in facilities where an interpreter is used during therapy sessions with CI children report that this can be done effectively. The use of an interpreter, though, may be problematic for a number of reasons, including the lack of availability of qualified interpreters, especially in certain languages, the lack of funding for interpreter services, and lack of knowledge by interpreters of the specific jargon used in our profession.[22] One clinician who has used an interpreter during intervention commented, "The interpreter almost has to be a therapist herself to be of any help during our sessions; her job really isn't about translating the words I say." Consider, too, the inherent nature of a parent–CI-child communication session. Close physical proximity, consistent eye contact, reading of facial expressions and body language are essential features of the clinician's relationship with the child. The presence of an interpreter doesn't always, but may interfere with these behaviors that create a nurturing communication environment where a child wants to talk and wants to listen.

GROUP 3

Children With Extended Family (EXF) Members Whose Linguistic and Cultural Heritage Is Valued

These children come from homes where the parents speak fluent English, but often have grandparents or other extended relatives who speak another language and practice different social customs. Many parents in such circumstances want their child with a CI to appreciate, for example, Grandma's lullaby sung in Japanese or

Grandfather's Navajo blessing and ritual dance. EXF parents often wish to expose their children, including a child with a CI, to the foods, clothing, and celebrations of their extended family, and I strongly encourage that this be done using the vocabulary and other concepts in the culturally appropriate language, even though that language is not used on a regular basis at home. When grandparents come to visit, they may celebrate special holidays or ceremonies. The rich heritage provided by such exposure enriches the lives and experiences of NH children, and we should expect no less from our children with cochlear implants. They are a part of their extended families, cochlear implant or not.

These EXF issues are also present in many families whose children with implants came to them through adoption. The parents wish to practice some of the customs and celebrations of the child's birth country, as a connection and source of pride for that child's unique legacy. One family with a CI child in my caseload adopted their child from Russia and chose to have him call his adoptive grandmother, *Bushka*, the Russian word for grandmother. They have also involved him in reunions with other families of children adopted from Russia and are considering joining a Russian Community group where he would learn about cultural aspects of his birth heritage.

This exposure is certainly not counterproductive to the learning of his anchor language, in this case, English. Perhaps in the future, the family may consider more explicit Russian language instruction within the community group, given that the parents themselves do not speak Russian.

Conclusion

Clinicians who work with children with CIs are no strangers to challenges. Bilingualism in our patients and their families represents yet another challenge because it is a subject largely unfamiliar to many monolingual Americans. The excitement of seeing some CI children successfully master two or more spoken languages, much as NH children can, should spur us to more fully explore this area, to develop appropriate intervention techniques, and to establish best practices for this increasing group of unique patients reflective of our diverse American population. L&C

Table 4

Examples of the Tag-Team Approach to Intervention With ENL Parents.

Skills to Teach Parents	Techniques Used by Clinician
• Use of strong voice	• Clinician models in English
• Importance of eye contact	• Frequent verbal and nonverbal feedback
• Slower rate but natural timing of speech	• Encourage parent re-do in native language
• Calling child's name to secure his attention	• Lots of compliments—prompt to try often
• Keep child at ear level	• Every voice important; relatives attend too
• Parents use music of their culture/language	• Sing, use melody and rhythm often
• Importance of quiet environment	• Demonstrate effectiveness
• Recognition of meaningful sounds	• Simple homework assignments with pictures
• Acoustic highlighting	• John Tracy Correspondence Course
• Cues for comprehension	• English/second language vocabulary paired
• Use others to provide language models	• Discourage direct parroting
• Equipment practice	• Write everything down and send home

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Appendix A. Recommended Resources for Bilingual CI Children and Families

(These are samples of available resources and not an exhaustive list.)

1. Dave Sindrey's "Elf on a Shelf" Gameboards and Giant CD Print Program contains both English and Spanish materials together; Wordplay publications (www.wordplay.com).
2. Traba Lenguas (www.spanishspeech.com) Numerous materials
3. Linguisystems (www.linguisystems.com) Spanish Bingo, Opposites, Pictures, Vocabulary
4. Academic Communication Associates (www.acadcom.com)
5. www.superduperinc.com Spanish phonology cards, Spanish music CD; MagneTalk Game
6. www.agbell.org Oliver y sus Audifonos; other Spanish books for parents & children; Suenos Realizados video; Learn To Talk Around the Clock Spanish CD of Signature Behaviors
7. Spanish-language website for parents of D/HH children: http://audiciondelbebe.org/
8. www.teachingmadeeasier.com
9. John Tracy Clinic (www.jtc.org) Home correspondence course in multiple languages
10. www.asha.org/shop Books, monographs, online journals for clinicians with ENL patients
11. www.BionicEar.com and www.HearingJourney.com Check the Listening Room for practical games and lessons