05 - 31.4a Language Disorder

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31.4a Language Disorder Language disorder consists of difficulties in the acquisition and use of language across many modalities, including spoken and written, due to deficits in comprehension or production based on both expressive and receptive skills. These deficits include reduced vocabulary, limited abilities in forming sentences using the rules of grammar, and impairments in conversing based on difficulties using vocabulary to connect sentences in descriptive ways. EXPRESSIVE LANGUAGE DEFICITS Expressive language deficits are present when a child demonstrates a selective deficit in expressive language development relative to receptive language skills and nonverbal intellectual function. Infants and young children with typically developing expressive language will laugh and coo by about 6 months of age, babble and verbalize syllables such as dadada or mamama by about 9 months, and by one year, babies imitate vocalizations and can often speak at least one word. Expressive speech and language generally continue to develop in a stepwise fashion, so that at a year and a half, children typically can say a handful of words, and by 2 years, children generally are combining words into simple sentences. By the age of 2½ years, children can name an action in a picture, and are able to make themselves understood through their verbalizations about half of the time. By 3 years, most children can speak understandably, and are able to name a color and describe what they see with several adjectives. At 4 years, children typically can name at least 4 colors, and can converse understandably. In the early years, prior to entering preschool, the development of proficiency in vocabulary and language usage is highly variable, and influenced by the amount and quality of verbal interactions with family members, and after beginning school, a child’s language skills are significantly influenced by the level of verbal engagement in school. A child with expressive language deficits may be identified using the Wechsler Intelligence Scale for Children III (WISC-III), in that verbal intellectual level may appear to be depressed compared with the child’s overall intelligence quotient (IQ). A child with expressive language problems is likely to function below the expected levels of acquired vocabulary, correct tense usage, complex sentence constructions, and word recall. Children with expressive language deficits often present verbally as younger than their age. Language disability can be acquired during childhood (e.g., secondary to a trauma or a neurological disorder), although less frequently, or it can be developmental; it is usually congenital, without an obvious cause. Most childhood language disorders fall into the developmental category. In either case, deficits in receptive skills (language comprehension) or expressive skills (ability to use language) can occur. Expressive language disturbance often appears in the absence of comprehension difficulties,

whereas receptive dysfunction generally diminishes proficiency in the expression of language. Children with expressive language disturbance alone have better prognoses, and less interference with learning, than children with mixed receptive–expressive

language disturbances. Although language use depends on both expressive and receptive skills, the degree of deficits in a given individual may be severe in one area, and hardly impaired at all in the other. Thus, language disorder can be diagnosed in children with expressive language disturbance in the absence of receptive language problems, or when both receptive and expressive language syndromes are present. In general, when receptive skills are sufficiently impaired to warrant a diagnosis, expressive skills are also impaired. In DSM-5 language disorder is not limited to developmental language disabilities; acquired forms of language disturbances are included. To meet the DSM-5 criteria for language disorder, patients must have scores on standardized measures of expressive or receptive language markedly below those of standardized nonverbal IQ subtests and standardized tests. Epidemiology The prevalence of expressive language disturbance decreases with a child's increasing age, and overall it is estimated to be as high as 6 percent in children between the ages of 5 and 11 years of age. Surveys have indicated rates of expressive language as high as 20 percent in children younger than 4 years of age. In school-age children over the age of 11 years, the estimates are lower, ranging from 3 percent to 5 percent. The disorder is two to three times more common in boys than in girls and is most prevalent among children whose relatives have a family history of phonologic disorder or other communication disorders. Comorbidity Children with language disorder have above-average rates of comorbid psychiatric disorders. In one large study of children with speech and language disorders, the most common comorbid disorders were attention-deficit/hyperactivity disorder (ADHD; 19 percent), anxiety disorders (10 percent), oppositional defiant disorder, and conduct disorder (7 percent combined). Children with expressive language disorder are also at higher risk for a speech disorder, receptive difficulties, and other learning disorders. Many disorders—such as reading disorder, developmental coordination disorder, and other communication disorders—are associated with expressive language disturbance. Children with expressive language disturbance often have some receptive impairment, although not always sufficiently significant for the diagnosis of language disorder on this basis. Speech sound disorder, formerly known as phonologic disorder, is commonly found in young children with language disorder, and neurologic abnormalities have been reported in a number of children, including soft neurologic signs, depressed vestibular responses, and electroencephalography (EEG) abnormalities. Etiology The specific causes of the expressive components of language disorder are likely to be

multifactorial. Scant data are available on the specific brain structure of children with language disorder, but limited magnetic resonance imaging (MRI) studies suggest that language disorders are associated with diminished left–right brain asymmetry in the perisylvian and planum temporale regions. Results of one small MRI study suggested possible inversion of brain asymmetry (right > left). Left-handedness or ambilaterality appears to be associated with expressive language problems with more frequency than right-handedness. Evidence shows that language disorders occur more frequently within some families, and several studies of twins show significant concordance for monozygotic twins with respect to language disorders. Environmental and educational factors are also postulated to contribute to developmental language disorders. Diagnosis Language disorder of the expressive disturbance type is diagnosed when a child has a selective deficit in language skills and is functioning well in nonverbal areas. Markedly below-age-

level verbal or sign language, accompanied by a low score on standardized expressive verbal tests, is diagnostic of expressive deficits in language disorder. Although expressive language deficits are frequently exhibited in children with autism spectrum disorders, these disturbances also occur frequently in the absence of autism spectrum disorder and are characterized by the following features: limited vocabulary, simple grammar, and variable articulation. “Inner language” or the appropriate use of toys and household objects is present. One assessment tool, the Carter Neurocognitive Assessment, itemizes and quantifies skills in areas of social awareness, visual attention, auditory comprehension, and vocal communication even when there are compromised expressive language and motor skills in very young children—up to 2 years of age. To confirm the diagnosis, a child is given standardized expressive language and nonverbal intelligence tests. Observations of children’s verbal and sign language patterns in various settings (e.g., school yard, classroom, home, and playroom) and during interactions with other children help ascertain the severity and specific areas of a child’s impairment and aid in early detection of behavioral and emotional complications. Family history should include the presence or absence of expressive language disorder among relatives. Clinical Features Children with expressive language deficits are vague when telling a story and use many filler words such as “stuff” and “things” instead of naming specific objects. The essential feature of expressive deficits in language disorder is marked impairment in the development of age-appropriate expressive language, which results in the use of verbal or sign language markedly below the expected level in view of a child’s nonverbal intellectual capacity. Language understanding (decoding) skills remain relatively intact. When severe, the disorder becomes recognizable by about the age of 18 months, when a child fails to utter spontaneously or even echo single words or sounds. Even simple words, such as “Mama” and “Dada,” are absent from the child’s active

vocabulary, and the child points or uses gestures to indicate desires. The child seems to want to communicate, maintains eye contact, relates well to the mother, and enjoys games such as pat-a-cake and peek-a-boo. The child’s vocabulary is severely limited. At 18 months, the child may be limited to pointing to common objects when they are named. When a child with expressive language deficits begins to speak, the language impairment gradually becomes apparent. Articulation is often immature; numerous articulation errors occur but are inconsistent, particularly with such sounds as th, r, s, z, y, and l, which are either omitted or are substituted for other sounds. By the age of 4 years, most children with expressive language disturbance can speak in short phrases, but may have difficulty retaining new words. After beginning to speak, they acquire language more slowly than do most children. Their use of various grammatical structures is also markedly below the age-expected level, and their developmental milestones may be slightly delayed. Emotional problems involving poor self-image, frustration, and depression may develop in school-age children. Damien was a friendly, alert, and hyperactive 2-year-old, whose expressive vocabulary was limited to only two words (mama, daddy). He used these words one at a time in inappropriate situations. He supplemented his infrequent verbal communications with pointing and other simple gestures to request desired objects or actions. He was unable to communicate for other purposes (e.g., commenting or protesting). Damien appeared to be developing normally in other areas, especially in gross motor skills, although his fine motor skills were also poor. Damien sat, stood, and walked, and played happily with other children, enjoying activities and toys that were appropriate for 2-year-olds. Although he had a history of frequent ear infections, a recent hearing test revealed normal hearing. Despite his expressive limitations, Damien exhibited age-appropriate comprehension for the names of familiar objects and actions and for simple verbal

instructions (e.g., “Put that down.” “Get your shirt.” “Clap your hands.”). However, due to his hyperactivity and impulsivity, he often required multiple directions to complete a simple task. Despite Damien’s slow start in language development, his pediatrician had reassured his parents that most of the time, toddlers like Damien spontaneously overcome their initial slow start in language development. Fortunately, Damien’s language delay spontaneously remitted by the time he entered preschool at 3½ years of age, although he was diagnosed at that time with attention-deficit/hyperactivity disorder. Jessica was a sociable, active 5-year-old, who was diagnosed with language disorder. She was well liked in kindergarten despite her language deficits and played with many of her classmates. During an activity in which each student recounted the story of Little Red Riding Hood to her doll, Jessica’s classmate’s story began: “Little Red Riding Hood was taking a basket of food to her grandmother who was sick. A bad wolf stopped Red Riding Hood in the forest. He tried to get the basket away from her

but she wouldn’t give it to him.” When it was Jessica’s turn, she tried to avoid being picked, but when she could not avoid her turn, Jessica’s story sounded quite different: Jessica struggled and came up with: “Riding Hood going to grandma house. Her taking food. Bad wolf in a bed. Riding Hood say, what big ears, and grandma? Hear you, dear. What big eyes, grandma? See you, dear. What big mouth, grandma? Eat you all up!” Jessica’s story was characteristic of expressive language deficits at her age: including short, incomplete sentences; simple sentence structures; omission of grammatical function words (e.g., is and the) and inflectional endings (e.g., possessives and present tense verbs); problems in question formation; and incorrect use of pronouns (e.g., her for she). Jessica, however, performed as well as her classmates in understanding the details and plot of the Riding Hood tale, as long as she was not required to retell the story verbally. Jessica also demonstrated adequate comprehension skills in her kindergarten classroom, where she readily followed the teacher’s complex, multistep verbal instructions (e.g., “After you write your name in the top left corner of your paper, get your crayons and scissors, put your library books under your chair, and line up at the back of the room.”). Ramon was a quiet, sullen 8-year-old boy whose expressive language problems had improved over time and were no longer obvious in play with peers. His speech now rarely contained the incomplete sentences and grammatical errors that were so evident when he was younger. Ramon’s expressive problems, however, were still impairing him in tasks involving abstract use of language, and he was struggling in his third-grade academic work. An example was Ramon’s explanation of a recent science experiment: “The teacher had stuff in some jars. He poured it, and it got pink. The other thing made it white.” Although each sentence was grammatical, his explanation was difficult to follow, because key ideas and details were vaguely explained. Ramon also showed problems in word finding, and he relied on vague and nonspecific terms, such as thing, stuff, and got. In the first and second grades, Ramon had struggled to keep up with his classmates in reading, writing, and other academic skills. By third grade, however, the increasing demands for written work were beyond his abilities. Ramon’s written work was characterized by poor organization and lack of specificity. In addition, classmates began to tease him about his difficulties, and he was ashamed of his disability and reacted quite aggressively, often leading to physical fighting. Nonetheless, Ramon continued to show relatively good comprehension of spoken language, including classroom teaching concerning abstract concepts. He also comprehended sentences that were grammatically and conceptually complex (e.g., “The car the truck hit had hubcaps that were stolen. Had it been possible, she would have notified us by mail or by phone.”) Differential Diagnosis

Language disorders are associated with various psychiatric disorders including other learning disorders and ADHD, and in some cases, the language disorder is difficult to separate from another dysfunction. In mixed receptive–expressive language disorder, language comprehension (decoding) is markedly below the expected age-appropriate level, whereas in expressive language disorder, language comprehension remains within normal limits. In autism spectrum disorders, children often have impaired language, symbolic and imagery play, appropriate use of gesture, or capacity to form typical social relationships. In contrast, children with expressive language disorder become very frustrated with their disorder, and are usually highly motivated to make friends despite their disability. Children with acquired aphasia or dysphasia have a history of early normal language development; the disordered language had its onset after a head trauma or other neurologic disorder (e.g., a seizure disorder). Children with selective mutism have normal language development. Often these children will speak only in front of family members (e.g., mother, father, and siblings). Children affected by selective mutism are socially anxious and withdrawn outside the family. Pathology and Laboratory Examination Children with speech and language disorders should have an audiogram to rule out hearing loss. Course and Prognosis The prognosis for expressive language disturbance worsens the longer it persists in a child; prognosis is also dependent on the severity of the disorder. Studies of infants and toddlers who are “late talkers” concur that 50 to 80 percent of these children master language skills that are within the expected level during the preschool years. Most children who are delayed in acquiring language catch up during preschool years. Outcome of expressive language deficits is influenced by other comorbid disorders. If children do not develop mood disorders or disruptive behavior problems, the prognosis is better. The rapidity and extent of recovery depends on the severity of the disorder, the child’s motivation to participate in speech and language therapy, and the timely initiation of therapeutic interventions. The presence or absence of hearing loss, or intellectual disability, impedes remediation and leads to a worse prognosis. Up to 50 percent of children with mild expressive language disorder recover spontaneously without any sign of language impairment, but those children with severe expressive speech disorder may persist in exhibiting some symptoms into middle childhood or later. Current literature shows that children who demonstrate poor comprehension, poor articulation, or poor academic performance tend to continue to have problems in these areas at follow-up 7 years later. An association is also seen between particular language impairment profiles and persistent mood and behavior problems. Children with poor comprehension associated with expressive difficulties seem to be more socially isolated

and impaired with respect to peer relationships. Treatment The primary goals for early childhood speech and language treatment are to guide children and their parents toward greater production of meaningful language. There are more data to support improvements through speech and language interventions for expressive language deficit in young school-aged children with primary deficits than in preschool children. A recent study investigating Parent-Child Interaction Therapy (PCIT) for school-aged children with expressive language impairment found that PCIT was particularly efficacious in improving a child’s verbal initiation, mean length of utterances, and the proportion of child-to-parent utterances. A large-scale randomized trial of a yearlong intervention targeting preschoolers with language delay in Australia found that a community-based program did not affect language acquisition in 2- and 3year-olds. Given the high rate of spontaneous remission of language deficits in preschoolers, and less than robust effects of interventions for children that young, treatment for expressive language disorder is generally not initiated unless it persists after the preschool years. Various techniques have been used to help a child improve use of such parts

of speech as pronouns, correct tenses, and question forms. Direct interventions use a speech and language pathologist who works directly with the child. Mediated interventions, in which a speech and language professional teaches a child's teacher or parent how to promote therapeutic language techniques, have also been efficacious. Language therapy is often aimed at using words to improve communication strategies and social interactions as well. Such therapy consists of behaviorally reinforced exercises and practice with phonemes (sound units), vocabulary, and sentence construction. The goal is to increase the number of phrases by using blockbuilding methods and conventional speech therapies. MIXED RECEPTIVE AND EXPRESSIVE DEFICITS Children with both receptive and expressive language impairment may have impaired ability in sound discrimination, deficits in auditory processing, or poor memory for sound sequences. Children with mixed receptive–expressive disturbance exhibit impaired skills in the expression and reception (understanding and comprehension) of spoken language. The expressive difficulties in these children may be similar to those of children with only expressive language disturbance, which is characterized by limited vocabulary, use of simplistic sentences, and short sentence usage. Children with receptive language difficulties may be experiencing additional deficits in basic auditory processing skills, such as discriminating between sounds, rapid sound changes, association of sounds and symbols, and the memory of sound sequences. These deficits may lead to a whole host of communication barriers for a child, including a lack of understanding of questions or directives from others, or inability to follow the conversations of peers or family members. Recognition of mixed expressive–receptive language disturbance may be delayed because of early misattribution of their

communication by teachers and parents as a behavioral problem rather than a deficit in understanding. The essential features of mixed receptive–expressive language disturbance are shown on scores on standardized tests; both receptive (comprehension) and expressive language development scores fall substantially below those obtained from standardized measures of nonverbal intellectual capacity. Language difficulties must be sufficiently severe to impair academic achievement or daily social communication. Epidemiology Mixed receptive-expressive language deficits occur less frequently than expressive deficits; however, epidemiologic data are scant regarding specific prevalence rates. Mixed receptive–expressive language disturbance is believed to occur in about 5 percent of preschoolers and to persist in approximately 3 percent of school-age children. It is known to be less common than expressive language disturbance. Mixed receptive– expressive language disorder is believed to be at least twice as prevalent in boys as in girls. Comorbidity Children with mixed receptive–expressive deficits are at high risk for additional speech and language disorders, learning disorders, and additional psychiatric disorders. About half of children with these deficits also have pronunciation difficulties leading to speech sound disorder, and about half also have reading disorder. These rates are significantly higher than the comorbidity found in children with only expressive language problems. ADHD is present in at least one third of children with mixed receptive–expressive language disturbances. Etiology Language disorders most likely have multiple determinants, including genetic factors, developmental brain abnormalities, environmental influences, neurodevelopmental immaturity, and auditory processing features in the brain. As with expressive language disturbance alone, evidence is found of familial aggregation of mixed receptive– expressive language deficits. Genetic contribution to this disorder is implicated by twin studies, but no mode of genetic transmission has been proved. Some studies of children with various speech and language disorders have also shown cognitive deficits, particularly slower processing of tasks involving naming objects, as well as fine motor tasks. Slower

myelinization of neural pathways has been hypothesized to account for the slow processing found in children with developmental language disorders. Several studies suggest an underlying impairment of auditory discrimination, because most children with the disorder are more responsive to environmental sounds than to speech sounds.

Diagnosis Children with mixed receptive–expressive language deficits develop language more slowly than their peers and have trouble understanding conversations that peers can follow. In mixed receptive–expressive language disorder, receptive dysfunction coexists with expressive dysfunction. Therefore, standardized tests for both receptive and expressive language abilities must be given to anyone suspected of having language disorder with mixed receptive–expressive disturbance. A markedly below-expected level of comprehension of verbal or sign language with intact age-appropriate nonverbal intellectual capacity, confirmation of language difficulties by standardized receptive language tests, and the absence of autism spectrum disorder, confirm the diagnosis of mixed receptive–expressive language deficits; however, in DSM-5, these deficits are included in the diagnosis of language disorder. Clinical Features The essential clinical feature of this language disturbance is significant impairment in both language comprehension and language expression. In the mixed type, expressive impairments are similar to those of expressive language disturbance, but can be more severe. The clinical features of the receptive component of the disorder typically appear before the age of 4 years. Severe forms are apparent by the age of 2 years; mild forms may not become evident until age 7 (second grade) or older, when language becomes complex. Children with language disorder characterized by mixed receptive–expressive disturbance show markedly delayed and below-normal ability to comprehend (decode) verbal or sign language, although they have age-appropriate nonverbal intellectual capacity. In most cases of receptive dysfunction, verbal or sign expression (encoding) of language is also impaired. The clinical features of mixed receptive–expressive language disturbance in children between the ages of 18 and 24 months result from a child’s failure to utter a single phoneme spontaneously or to mimic another person’s words. Many children with mixed receptive–expressive language deficits have auditory sensory difficulties and compromised ability to process visual symbols, such as explaining the meaning of a picture. They have deficits in integrating both auditory and visual symbols—for example, recognizing the basic common attributes of a toy truck and a toy passenger car. Whereas at 18 months, a child with expressive language deficits only comprehends simple commands and can point to familiar household objects when told to do so, a child of the same age with mixed receptive–expressive language disturbance typically cannot either point to common objects or obey simple commands. A child with mixed receptive–expressive language deficits may appears to be deaf. He or she responds normally to sounds from the environment, but not to spoken language. If the child later starts to speak, the speech contains numerous articulation errors, such as omissions, distortions, and substitutions of phonemes. Language acquisition is much slower for children with mixed receptive–expressive language disturbance than for other children of the same age.

Children with mixed receptive–expressive language disturbance have difficulty recalling early visual and auditory memories and recognizing and reproducing symbols in proper sequence. Some children with mixed receptive–expressive language deficits have a partial hearing defect for true tones, an increased threshold of auditory arousal, and an inability to localize sound sources. Seizure disorders and reading disorder are more common among the relatives of children with mixed receptive–expressive problems than in the general population. Pathology and Laboratory

Examination An audiogram is indicated for all children thought to have mixed receptive–expressive language disturbance to rule out or confirm the presence of deafness or auditory deficits. A history of the child and family and observation of the child in various settings help to clarify the diagnosis. Jenna was a pleasant 2-year-old, who did not yet use any spoken words, and did not respond to simple commands without gestures. She made her needs known with vocalizations and simple gestures (e.g., showing or pointing) such as those typically used by younger children. She seemed to understand the names for only a few familiar people and objects (e.g., mommy, daddy, cat, bottle, and cookie). Compared with other children her age, she had a small comprehension vocabulary and showed limited understanding of simple verbal directions (e.g., “Get your doll.” “Close your eyes.”). Nonetheless, her hearing was normal, and her motor and play skills were developing as expected for her age. She showed interest in her environment and in the activities of the other children at her day care. Lena was a shy, reserved 5-year-old who grew up in a bilingual home. Lena’s parents and older siblings spoke English and Cantonese proficiently. Her grandparents, who lived in the same home, spoke only Cantonese. Lena began to understand and speak both languages much later than her older siblings had. Throughout her preschool years, Lena continued to develop slowly in comprehension and production. At the start of kindergarten, Lena understood fewer English words for objects, actions, and relations than her classmates did. Lena was unable to follow complex classroom instructions, particularly those that involved words for concepts of time (e.g., tomorrow, before, or day) and space (e.g., behind, next to, or under). It was also hard for Lena to match one of several pictures to a syntactically complex sentence that she had heard (e.g., “It was not the train she was waiting for.” “Because he had already completed his work, he was not kept after school.”). Lena played with other children but only rarely tried to speak with them, which led to her being ostracized by her classmates. Lena’s attempts at conversations usually broke down, because she misinterpreted what others said or could not express her own thoughts clearly. Consequently, her classmates generally ignored her, preferring instead to play with more verbally competent peers. Lena’s infrequent interactions further limited her

opportunities to learn and to practice her already weak language skills. Lena also showed limited receptive and expressive skills in Cantonese, as revealed by an assessment conducted with the assistance of a Cantonese interpreter. Nonetheless, her nonverbal cognitive and motor skills were within the normal range for her age. Lena was quite proficient in solving spatial and numerical, problems, provided they were presented on paper and were not word problems. Mark received a diagnosis of Language Disorder, based on mixed receptive– expressive deficits when he was a preschooler. By 7 years of age, he had also received the comorbid diagnoses of reading disorder and ADHD. This combination of language, reading, and attention problems made it virtually impossible for Mark to succeed in school, although he was able to engage his peers during free play. His comprehension and attention difficulties limited his ability to understand and to learn important information, or to follow classroom instructions or discussions. Mark fell further and further behind his classmates. He was also disadvantaged because he could read only a few familiar words. This meant that he was neither motivated nor able to learner academic information outside of the classroom by reading. Mark received tutoring and speech and language interventions, and despite some improvements, he continued to lag behind his classmates academically. Despite his academic problems, however, Mark made friends during sports activities in which he excelled, and continued to show nonverbal intellectual skills within the average range. Differential Diagnosis Children with language disorder characterized by mixed receptive–expressive

deficits have a deficit in language comprehension as well as in language production. The receptive deficit may be overlooked at first, because the expressive language deficit may be more obvious. In expressive language disturbance alone, comprehension of spoken language (decoding) remains within age norms. Children with speech sound disorder and child-onset fluency disorder (stuttering) have normal expressive and receptive language competence, despite the speech impairments. Most children with mixed receptive–expressive language disturbance have a history of variable and inconsistent responses to sounds; they respond more often to environmental sounds than to speech sounds (Table 31.4a-2). Intellectual disability, selective mutism, acquired aphasia, and autism spectrum disorder should also be ruled out. Table 31.4a-2 Differential Diagnosis of Language Disorder

Course and Prognosis The overall prognosis for language disorder with mixed receptive–expressive disturbance is less favorable than that for expressive language disturbance alone. When the mixed disorder is identified in a young child, it is usually severe, and the short-term prognosis is poor. Language develops at a rapid rate in early childhood, and young children with the disorder may appear to be falling behind. In view of the likelihood of comorbid learning disorders and other mental disorders, the prognosis is guarded. Young children with severe mixed receptive-expressive language deficits are likely to have learning disorders in the future. In children with mild versions, mixed disorder may not be identified for several years, and the disruption in everyday life may be less overwhelming than that in severe forms of the disorder. Over the long run, some children with mixed receptive–expressive language disturbance achieve close to normal language functions. The prognosis for children who have mixed receptive–expressive language disturbances varies widely and depends on the nature and severity of the damage. Treatment A comprehensive speech and language evaluation is recommended for children with mixed receptive–expressive language disturbance, given the complexities of having both deficits. Some controversy exists as to whether remediation of receptive deficits before expressive language provides more efficacy overall. A review of the literature indicates that it is not more beneficial to address receptive deficits before expressive, and in fact, in some cases, remediation of expressive language may reduce or eliminate the need for receptive language remediation. Thus, current recommendations are either to address

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Revision #1
Created 2026-01-04 19:52:06 UTC by Omar Ayman
Updated 2026-01-04 19:52:06 UTC by Omar Ayman