

## Clinical Exchange

# A Letter to the Parent(s) of a Child With Developmental Apraxia of Speech

## Part III: Other Problems Often Associated With the Disorder

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Dear Parent(s):

Perhaps your child's speech problems, now diagnosed as developmental apraxia of speech (DAS), have not been your only concern. If so, your child is like many other children with DAS. Unfortunately, these children are at risk for several types of other problems as well as their problems with speech. Some speech-language pathologists look at these problem areas as part of the overall DAS syndrome. Others view them as problems that may co-occur with DAS. The latter position has merit because relationships between DAS and these additional problem areas have not yet been clearly defined. Nonetheless, the existence of these other problems cannot be ignored. All need to be addressed in the diagnostic process, and in the develop-

ment of overall therapy plans. Table 1 may be helpful in guiding your reading of this letter.

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### LANGUAGE DEVELOPMENT PROBLEMS

"Language" is the system of rules that allows us to understand what is said to us and to express ourselves.

**Table 1.** Some of the problems that may be associated with DAS.

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#### Language problems

- Language comprehension appears better than expression.
- Reduced vocabulary size may be present.
- Grammar, or syntax, errors are often present.
- Organizational problems when relaying information to others may be present.
- Poor social use of language may be evident.

#### Academic problems

- Reading
- Writing
- Spelling
- Other academic areas, such as mathematics

#### Motor skills problems

- Gross (large muscles) motor skills (e.g. walking, running, riding a bicycle)
- Fine (small muscle) motor skills (e.g. printing, writing, using scissors)

#### Chewing and swallowing difficulties

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**ABSTRACT:** Two previous letters written to the parent(s) of children with developmental apraxia of speech (DAS) shared information regarding the speech characteristics and the current thinking concerning the nature and causes of the disorder. A future letter will discuss treatment of DAS. However, children with DAS often seem to have problems in addition to those involving their speech production. This third letter discusses several of the problems that may co-occur with DAS, and includes an appendix of publications that can provide additional information concerning other problems that may be present with DAS.

**KEY WORDS:** developmental apraxia of speech, developmental language disorders, motor skills, swallowing

There are a number of aspects to language, including vocabulary, grammar, how we organize information, and how we relate with other people.

Generally, speech-language pathologists find that children with DAS understand language better than they are able to use language to express themselves, although this is not always the case. Most children with DAS have problems in the “use” or expression of language. Typically, language problems can manifest themselves in different ways, such as having an inadequate vocabulary and knowledge of concepts, incorrect use of grammar or syntax forms, difficulties in organizing what is being said so that the listener can “follow” the information provided, and inappropriate use of the social aspects of language, such as knowing how to begin and end a conversation, how to request information, and so forth.

The language development problems of children with DAS are often suspected at a very early age. Many parents report that their child, later diagnosed with DAS, was late in developing language skills. Included were the very late arrival of such important milestones as the age when the first word was said, and when two and three words were combined. Some children were reported to have unique aspects in their language development, such as prolonged use of a single word to convey multiple meanings, “loss” of words, extensive use of gestures, and use of “mouth noises” and grunting during communication attempts.

Some children with DAS are so difficult to understand that the problems with their language skills may exist because their speech disorder limits their successful use of language. Other children with DAS may have less severe disorders within their language development. The speech-language pathologist working with your child will assess his or her language development and incorporate language objectives as needed into your child’s overall therapy program. Thus, your child’s therapy sessions are likely to focus on both speech *and* language goals.

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## ACADEMIC PROBLEMS

Children with DAS may also be at risk academically. Problems often arise with reading, writing, and spelling skills, which are heavily dependent on the appropriate development of language skills. Other academic areas, such as mathematics, may be difficult for the child with DAS as well, due to poor language development, which is now manifested as a learning disability. Many children who exhibit DAS receive special academic support through their schools. In these cases, the school speech-language pathologist, along with the classroom teacher and other educational specialists, will become members of your child’s educational planning team. This team should seek your input as well.

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## MOTOR SKILLS PROBLEMS

The child with DAS often appears to have problems with other motor systems and motor skills in addition to

those necessary for speech. Children with DAS are frequently described as being “clumsy” or “sloppy” when performing gross motor (large muscle) and/or fine motor (small muscle) skills. Gross motor skills include such activities as walking, running, and riding a tricycle or bicycle; fine motor skills involve the use of the hands in such activities as coloring, writing, and using scissors. When there are concerns in this area, the child might benefit from an assessment by a physical therapist or an occupational therapist, who, in turn, may develop therapy programs that will help the child develop or refine these needed motor skills.

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## CHEWING AND SWALLOWING DIFFICULTIES

Another problem area that occasionally co-occurs with DAS is difficulty with chewing and swallowing. The processes of sucking, chewing, drinking, and swallowing involve the development of highly skilled motor movements that some children with DAS find difficult to perform. As infants, some children who are later diagnosed with DAS are reported by parents to have problems nursing. Later, these children are described as messy eaters who often choked during eating or drinking, and may be observed to drool. Some children with DAS may have strong preferences as to the texture and density of the foods they eat. For example, meats may be refused except when finely chopped or ground, as in hamburger or ground turkey, whereas other children may refuse to eat “hard” foods, such as apples or celery, preferring softer foods, such as applesauce, instead. Children with DAS who seem to have chewing and swallowing problems may need assessment and therapy for these difficulties by a speech-language pathologist or an occupational therapist with specific training in this area.

It should be stressed that the co-occurring problems discussed in this letter may, or may not, be a problem for your child with DAS. However, being aware of the possibility of the additional problems should alert parents when these aspects of development do not seem to be “on schedule” or “quite right.” As with communication disorders, early identification and therapy should be the goal to maximally help the “total” child.

Sincerely,

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## APPENDIX

If you would like to further explore the various types of problems that often co-occur with DAS, the following references may be of help.

**Aram, D. M., & Nation, J. E.** (1982). Language to speech processing. In D. M. Aram & J. E. Nation (Eds.), *Child language disorders* (pp. 144–249). St. Louis, MO: C.V. Mosby.

This chapter reviews the literature involving the language development, understanding, and use by children with developmental verbal apraxia.

**Hall, P. K., Jordan, L. S., & Robin, D. A.** (1993). Language and academic learning problems: Co-occurring characteristics of children exhibiting DAS. In P. K. Hall, L. S. Jordan, & D. A. Robin, *Developmental apraxia of speech: Theory and clinical practice* (pp. 67–86). Austin, TX: PRO-ED.

The literature involving the language development and skills, as well as the academic performance of, children with DAS is reviewed.