

Supplemental Material S4.

Five-point rating scale of confidence in diagnosis of childhood apraxia of speech (CAS; from Murray et al., 2015, adapted from ANCDs guidelines, Wambaugh et al., 2006).

Level	Primary characteristics	Nondiscriminative characteristics	Comorbidity
Level 1	All the primary characteristics were described: <ul style="list-style-type: none"> ● Inconsistency AND ● Lengthened and disrupted coarticulatory transitions between sounds and syllables AND ● Inappropriate prosody. 	CAS was the primary diagnosis described. Any characteristics that were attributable to other disorders may have been described, but were not used to diagnose CAS.	CAS without another co-morbid disorder was reported (excluding expressive language delay).
Level 2	All the primary characteristics were described: <ul style="list-style-type: none"> ● Inconsistency AND ● Lengthened and disrupted coarticulatory transitions between sounds and syllables AND ● Inappropriate prosody. 	CAS was the primary diagnosis described. Other characteristics attributable to other disorders (e.g., dysarthria) were described and may have been used to diagnose CAS.	This includes: <ul style="list-style-type: none"> ● CAS without another co-morbid disorder (excluding expressive language delay) OR ● Clear cases of co-morbid CAS, where CAS was the primary diagnosis.
Level 3	Two of the three primary characteristics were described: <ul style="list-style-type: none"> ● Inconsistency AND/OR ● Lengthened and disrupted coarticulatory transitions between sounds and syllables AND/OR ● Inappropriate prosody. 	CAS was described. Other characteristics that were attributable to other disorders (e.g., dysarthria) were described and may have been used to diagnose CAS.	This includes: <ul style="list-style-type: none"> ● CAS without another co-morbid disorder OR ● Clear cases of co-morbid CAS, where CAS was the primary diagnosis OR ● Cases of CAS where another co-morbid disorder had the same severity (e.g., language delay, dysarthria).
Level 4	Only one of the three primary characteristics was reported or incomplete/inadequate description of the primary characteristics of CAS was provided.	Other characteristics that were attributable to other disorders may have been described and it is unclear whether these were used to diagnose CAS.	Unclear whether CAS was the primary diagnosis or not.

Level 5	Diagnosis of CAS was reported or implied, but no primary characteristics were described.	Unclear whether CAS diagnosis was likely and/or whether CAS was the primary diagnosis.	Other co-morbid disorders may be present.
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Examples of Clinical Characteristics – Non-discriminative

- articulatory groping – audible and/or visible and probably distorted relative to target
- increasing errors with increasing word length
- speech initiation difficulties
- awareness of errors (e.g., self-corrections)
- automatic speech better than propositional speech
- expressive-receptive speech/language gap
- transposition errors (metathesis)

Additional Considerations

Severe CAS can be diagnosed by mutism or extremely limited repertoire of speech sounds in conjunction with relatively preserved language skills and in the absence of abnormal Nonspeech oral functions for vegetative purposes and volitional movement (ASHA, 2007).

Five-point rating scale of confidence in diagnosis of all speech sound disorders (SSDs; from Murray et al., 2015, adapted from ANCDs guidelines, Wambaugh et al., 2006).

Level	Description
Level 1	All of the primary characteristics consistent with the definition of the given disorder. Any characteristics that are attributable to other disorders may be described, but are not used to diagnose the disorder. No exclusionary behaviors are described.
Level 2	All of the primary characteristics consistent with definition of the given disorder and some speech characteristics that may be attributable to other speech sound disorders. No exclusionary behaviors are described.
Level 3	Most of the primary characteristics consistent with definition of the given disorder and some speech characteristics that may be attributable to other speech sound disorders. No exclusionary behaviors are described.
Level 4	Incomplete/inadequate description of the discriminative characteristics. No exclusionary behaviors are described.
Level 5	Stated diagnosis of the given disorder, but no description of characteristics consistent with that diagnosis and descriptions that are contradictory to the criteria for diagnosis.