

Cornelia de Lange Syndrome (CdLS)

What is CdLS?

- A genetic condition that affects genes during prenatal development
- Physical features include: thin, connected eyebrows; long eyelashes; low-set ears; short, upturned nose; thin lips; cleft palate
- Two subtypes: *classical* and *mild*
- Also known as Brachmann de Lange Syndrome

Common Medical, Behavioral, and Intellectual Difficulties

Medical

- Low birthweight
- Gastroesophageal reflux disease (GERD), which affects digestion
- Heart defects
- Seizures
- Feeding difficulties
- Vision/hearing impairments
- Limb abnormalities

Behavioral & Intellectual

- Intellectual disability
- Anxiety/Obsessive-compulsive disorder
- Self-injury
- Attention deficit hyperactivity disorder
- Autistic behaviors

Communication in CdLS

- Delays in language development often seen in expressive language skills, syntax, grammar, vocabulary
- Characterized by limited number of words used, attempts to communicate, turn-taking, eye contact
- *Classical subtype*:
 - Mostly nonverbal
 - Can learn gestures and sign language
 - May benefit from augmentative and alternative communication
- *Mild subtype*:
 - Often can learn to speak in sentences with speech-language therapy
 - Exhibit poor grammatical skills even with a high vocabulary
- *Both subtypes*:
 - Are recommended to begin intervention services as early as possible
 - Have higher language comprehension than production



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For more information, visit:

<http://www.asha.org/>

<http://www.cdlsusa.org/>

<http://ghr.nlm.nih.gov/condition/cornelia-de-lange-syndrome>

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Speech-Language Therapy for Children with CdLS

- Limited clinical research, but the following techniques are often used:
 - *Enhanced Milieu Teaching*: child-directed play that adapts the surroundings and toys the child has access to in order to facilitate communication
 - *Augmentative and Alternative Communication*: use of speech-generating devices, communication boards, or picture cards to facilitate communication
 - *Broadcast talk*: talking about what the child is doing in order to provide an appropriate model of language
 - *Gesture integration*: use of gestures to communicate basic needs
 - *Positive reinforcements*: objects like food and toys that are given when the child demonstrates appropriate behaviors

Therapy within Educational Setting

- Use of an *Individual Family Service Plan* (IFSP) or *Individualized Education Program* (IEP) with a multidisciplinary team to help the child receive support from multiple areas of intervention
- Important factors to consider:
 - Classroom modifications (e.g., use of a sound amplification system such as an FM system)
 - Curriculum modifications (e.g., simplified instructions, increased use of visual aids)
 - Playtime modifications that promote turn-taking and communication with peers



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