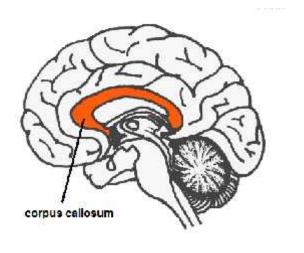
# AGENESIS OF THE CORPUS CALLOSUM (ACC)

# What is ACC?

- A birth defect in which the structure that connects the two sides of the brain (i.e., the corpus callosum) is partially or completely absent
- Exact cause is often unknown
- Can be detected by imaging systems such as a prenatal ultrasound, MRI, or CT scan
- Can occur by itself or with other conditions such as:
  - o seizures
  - o cognitive impairment
  - o hydrocephaly
  - o Arnold-Chiari malformation
  - o Dandy Walker syndrome





# **Characteristics of ACC**

ACC presents differently in each person. Some children have mild symptoms and go undiagnosed until adulthood, while other children with ACC display more developmental challenges.

ACC <u>may</u> affect these areas of development:

### General Development

- Feeding difficulties
- Delayed toilet training

### **Physical**

- Clumsiness and poor coordination
- Vision and/or hearing impairments
- Low muscle tone

#### Social and Behavioral

- Difficulty taking the perspective of others
- Difficulty reading social cues and emotions
- Restless or hyperactive behavior

## Cognition and Communication

- Difficulty with complex problemsolving
- Difficulty understanding nonliteral language
  - o e.g. "raining cats and dogs"
- Delays in expressive communication

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# Impact of Communication Challenges

Children with ACC may struggle with multiple parts of communication such as expressive language, understanding nonliteral language, and taking the perspective of others.

These challenges can have a negative impact on:

- forming and maintaining social relationships
- communicating emotions
- future academic performance

A speech-language pathologist (SLP) can help support your child in these areas!

# **Classroom Supports**

- Include visual instructions with spoken instructions for classroom rules and activities
- A visual schedule that includes pictures of the day's activities may help the child know what to do next
- Explain common figures of speech
  e.g. "It's raining cats and dogs!
  That means that it is raining a <u>lot!</u>)
- Reduce classroom distractions when possible, or dedicate a small area for quiet, focused activities such as picture books or puzzles

## **Treatment**

There are no medical treatments for ACC itself, but there are treatments for side effects such as seizures and sensory impairments.

However, developmental therapies (e.g., physical therapists, occupational therapists, SLPs), educational support, and adult services can help compensate for symptoms of ACC.

With the right support, children with ACC can grow up to be healthy, functioning adults.

# **Preschool Activities**

### Guided role play:

- Give the child roles to act out and ask how they felt in those roles
- Encourage perspective-taking ("How would you feel if someone gave you a present?")

### Problem of the day:

 Present the child with a problem to solve ("What if the class pet's cage was left open?")

### End of day recap:

- Children share favorite moments, conflicts, and resolutions as a group
- Encourage talking about emotions ("I felt happy/sad when \_\_\_\_\_"

### "Integrative" games:

• Games like "Simon Says" incorporate multiple skills such as following spoken directions, watching visual cues, and practicing balance and coordination