

ANGELMAN SYNDROME (AS)

AND COMMUNICATION

Angelman Syndrome Facts

- Usually caused by a **deletion of part of gene** on chromosome 15
- Typically **not passed on** from parent to child
- Affects **1 in 15,000** people
- Boys and girls are equally affected
- Diagnosis happens around age **2 to 5**
- Children with AS can *occasionally* also have Autism Spectrum Disorder
- There is a **broad range** of symptoms in children with AS



UA SCIENCE

Speech, Language,
& Hearing Sciences

Common Characteristics

- **Developmental delay*** (e.g., not walking until several years old)
- Jerky, **uncoordinated movements***
- **Happy demeanor** with frequent, unprovoked laughing*
- Severe **speech impairment***
- **Attention deficits** and hyperactivity
- **Learning disabilities**
- Abnormal sleep patterns
- Abnormal patterns in brain activity
- **Seizures** (usually begin before 3 years of age)

*seen in all children with AS

Frequent Physical Features

- Wide mouth and widely-spaced teeth
- Excessive drooling and chewing behavior
- Protruding tongue
- Prominent chin
- Flat back of head
- Smaller-than-average head size
- Lack of pigmentation in skin, hair, and eyes
- Abnormal eye alignment
- Curved spine



For more information, visit:

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

<http://cureangelman.net/>

ANGELMAN SYNDROME

AND COMMUNICATION

Language and Communication

- **Speech is rarely acquired as the main, or primary, way of communication**
 - Typically have only a handful of words
- **Children with AS usually can understand language better than they can produce it**
 - Can follow simple directions and commands
- **Children with AS communicate primarily by using:**
 - nonspecific vocalizations
 - head nods and shakes
 - eye contact
 - alternative communication devices (e.g., a picture board that the child uses to point to what he or she wants, such as a specific food or toy)
 - gestures
 - *Contact gestures*: physically touching an object to indicate a want or need
 - *Enhanced Natural Gestures*: See side table



UA SCIENCE

Speech, Language,
& Hearing Sciences

Enhanced Natural Gestures

Enhanced Natural Gestures are gestures that...

- the child already **spontaneously produces or is able to produce**, given existing motor skills (e.g., lifting and cupping both hands without holding a juice cup)
- the child uses in a **communicative way** (e.g., to express desire for a juice cup)
- the child does **without relying on physical contact with the desired object** (e.g., child can replicate gesture of holding the cup without actually holding it)
- are understood by strangers, given context (i.e., gestures tend to be more literal rather than figurative)

Supporting Communication in a Child with Angelman Syndrome

- **Speech-Language Therapy Goals**
 - Maximize functional communication (e.g., turn-taking, appropriately requesting/rejecting)
 - Gesture training, especially using Enhanced Natural Gestures
 - Picture communication to express choices between objects
- Encourage children with AS to **use all methods of communication** available to them—this includes gestures, speech, and communication boards.
- **Learn the systems that your child is using to communicate.** If your child is using a new system or device to communicate that you are not familiar with, ask the speech-language pathologist to show you how to use it.
- The best intervention is a **team approach** and may include a physical therapist, occupational therapist, special education teacher, speech-language pathologist, and the child's caregivers!

For more information, visit:

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

<http://cureangelman.net/>

