What is Williams Syndrome?

Williams Syndrome also known as Williams-Beuren Syndrome was discovered in 1961 by J.C.P. Williams, a cardiologist from New Zealand. Williams-Beuren Syndrome is a rare disorder that with a prevalence of 1 in 7,500 to 20,000 caused by the deletion of genetic material from chromosome 7.

Signs and Symptoms

Williams-Beuren Syndrome symptoms may include:

- Heart or blood vessel problems
- Hypercalcemia
- Low birth weight
- Musculoskeletal problems
- Developmental delays

Facts on Williams Syndrome

- It is a genetic condition that is present a birth.
- It is a developmental disorder
- Tend to have a mild or moderate intellectual disability.
- It is also known as Beuren Syndrome and Williams-Beuren Syndrome.
- The symptoms were first described by John C.P. Williams in 1961.
- A year later, German Physician, A.J. Beuren described three new incidents of patients with similar facial features.
- It is caused by the spontaneous deletion of 26-28 genes on Chromosome #7
- The deletion is caused by either the sperm or the egg.
- The deletion is present at the time of conception
- The most common symptoms of Williams Syndrome includes unusual facial features and heart defects.
• The diagnosis is typically confirmed after identifying facial features and genetic testing.
• An individual with Williams Syndrome has a 50% chance of passing the disorder on to their children.
• Williams Syndrome affects 1 in 10,000 people worldwide.
• An estimated 20,000 to 30,000 people in the United States are affected.
• It occurs in both males and females equally
• It is found in every culture
• Individuals with Williams Syndrome tend to be overly friendly.
• People with Williams Syndrome often have difficulty with visual-spatial tasks
• Congenital heart defects (CHD) occur in approximately 75 percent of children
• By the age of 30, most individuals with Williams Syndrome have pre-diabetes or diabetes.

**Teaching Strategies**

**Learning Characteristics**

• ADHD
• Enjoys music
• Developmental delay
• Excellent long-term memory
• Learning disability
• Poor fine motor skills
• Seizures
• Tactile defensiveness

Students with Mild intellectual disabilities will have difficulty with abstract thinking, executive functioning including planning, prioritizing, and cognitive flexibility. According to the Williams Syndrome Association Website, Children with Williams Syndrome face challenges with processing non-verbal information and displays difficulty with attention to detail.

Strategies should include:

• Using short sentences
• Repeat directions
• Break task into small steps
• Use concrete examples when introducing new words or concepts.
• Teach one concept at a time
• Use a multisensory approach which will help to stimulate learning
• Utilize visual learning style including the use of flash cards, pictures, images, handouts and colors.