

Genetic Disorder Prediction Report

Patient Age: 11

Gender: Male

Predicted Disorder: Genetic Disorder

Subclass: Leigh syndrome

Date: 26-12-2025

Description:

Overview

Leigh syndrome is a rare genetic disorder that affects the brain and nervous system. It typically appears in the first few years of life and can lead to progressive neurological damage.

Causes

Leigh syndrome is caused by mutations (changes) in the genes that are responsible for producing energy in the body's cells.

Symptoms

The symptoms of Leigh syndrome can vary widely but often include:

- **Developmental delays**: Children may not reach milestones like sitting up or walking at the expected age.
- **Loss of motor skills**: Skills that were previously learned may be lost.
- **Muscle weakness**: Children may have difficulty with movement and coordination.
- **Seizures**: Some children experience seizures, which are sudden bursts of electrical activity in the brain.
- **Breathing problems**: There may be issues with breathing, especially during sleep.
- **Feeding difficulties**: Infants may have trouble feeding or gaining weight.

Diagnosis

Diagnosing Leigh syndrome usually involves several steps:

1. **Medical history**: The doctor will ask about the child's symptoms and family history.
2. **Physical examination**: A thorough examination will help identify any physical signs of the disorder.
3. **Genetic testing**: This is the most definitive way to diagnose Leigh syndrome. A blood sample may be taken to look for specific genetic changes.
4. **Imaging tests**: MRI scans of the brain can show characteristic changes associated with Leigh syndrome.

Treatment

Currently, there is no cure for Leigh syndrome, but treatment focuses on managing symptoms and improving quality of life.

- **Physical therapy**: To help with movement and coordination.
- **Occupational therapy**: To assist with daily activities.
- **Medications**: To control seizures or other symptoms.
- **Nutritional support**: Special diets or feeding tubes may be necessary if the child has feeding difficulties.

Follow-up Advice

If your child has been diagnosed with Leigh syndrome, regular follow-up with a healthcare team is essential to monitor the condition and adjust treatment as needed.