

Genetic Disorder Prediction Report

Patient Age: 8

Gender: Female

Predicted Disorder: Genetic Disorder

Subclass: Leigh syndrome

Date: 14-02-2026

Description:

Overview

Leigh syndrome is a rare genetic disorder that affects the brain and nervous system. It typically appears in early childhood and can lead to progressive neurological damage.

Causes

Leigh syndrome is caused by mutations in genes that are important for energy production in cells. These mutations affect the mitochondria, which are responsible for generating energy.

Symptoms

Symptoms of Leigh syndrome can vary but often include:

- Delayed development or loss of milestones (like sitting or walking)
- Weak muscle tone (hypotonia)
- Difficulty with movement and coordination
- Seizures
- Breathing problems
- Feeding difficulties
- Irritability or unusual behavior

Symptoms usually start appearing in the first year of life and can worsen over time.

Diagnosis

To diagnose Leigh syndrome, doctors will typically:

1. Review the child's medical history and symptoms.
2. Conduct a physical examination.
3. Order tests such as:
 - Blood tests to check for metabolic issues.
 - MRI scans to look for changes in the brain.
 - Genetic testing to identify specific mutations.

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.
- Medications to control seizures.
- Nutritional support, sometimes through feeding tubes if needed.
- Regular monitoring by a team of specialists, including neurologists and geneticists.

Follow-up Advice

If your child has been diagnosed with Leigh syndrome, regular follow-up appointments are important. Here are some key points to remember:

- Keep a close eye on your child's development and report any changes to their healthcare team.
- Work with therapists to support your child's physical and developmental needs.
- Stay informed about the condition and connect with support groups for families affected by Leigh syndrome.
- Discuss any new symptoms or concerns with your doctor promptly.

Remember, while Leigh syndrome can be challenging, many families find ways to support their children and manage the condition effectively.