

Genetic Disorder Prediction Report

Patient Age: 11

Gender: Male

Predicted Disorder: Genetic Disorder

Subclass: Leber's hereditary optic neuropathy

Date: 26-12-2025

Description:

Overview

Leber's hereditary optic neuropathy (LHON) is a genetic condition that primarily affects vision. It is caused by mutations in the mitochondrial DNA, which is passed down from mother to child. Mitochondria are small energy-producing structures found in every cell of the body.

Causes

LHON is caused by mutations in the mitochondrial DNA, which is passed down from mother to child. Mitochondria are small energy-producing structures found in every cell of the body.

Symptoms

The main symptom of LHON is sudden vision loss, which usually occurs in one eye and can then affect the other eye over time.

- Blurry or cloudy vision
- Dark spots in their vision
- Difficulty seeing colors

Diagnosis

To diagnose LHON, a doctor will typically:

- Take a detailed medical history and ask about family history of vision problems.
- Conduct a comprehensive eye exam to assess vision and check for optic nerve damage.
- Perform genetic testing to look for the specific mutations associated with LHON.

Treatment

Currently, there is no cure for LHON, and treatment options are limited. However, some studies suggest that early diagnosis and management can help prevent further vision loss.

Follow-up Advice

If you or someone you know has been diagnosed with LHON, regular follow-up appointments with an eye specialist are important to monitor vision and overall health.