

# Genetic Disorder Prediction Report

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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 the eyes, leading to progressive vision loss.

## ### Causes

LHON is caused by mutations in the mitochondrial DNA, which is the genetic material found in the mitochondria of cells.

## ### Symptoms

The main symptom of LHON is a sudden loss of vision, which often starts in one eye and can progress to both eyes.

- Blurred or cloudy vision
- Changes in color perception
- Difficulty seeing in low light

## ### Diagnosis

To diagnose LHON, a doctor will typically:

- Review your medical history and family history.
- Conduct a comprehensive eye examination, including tests to assess your vision.
- Perform genetic testing to identify mutations in mitochondrial DNA.

## ### Treatment

Currently, there is no cure for LHON, but some treatments may help manage the condition or improve vision.

- Nutritional supplements, such as idebenone, which may help support optic nerve health.
- Vision rehabilitation services to help adapt to vision loss.

## ### Follow-up Advice

If you or a family member is diagnosed with LHON, it's important to have regular follow-ups with your eye doctor.

If you notice any sudden changes in your vision, seek medical attention immediately.