

# Genetic Disorder Prediction Report

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Patient Age: 10

Gender: Female

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 your eyesight. It is

## ### Causes

LHON is caused by mutations (or changes) in the mitochondrial DNA, which is the genetic material found

## ### Symptoms

The main symptom of LHON is a sudden loss of vision, which usually occurs in one eye and can then affect

- Changes in color vision (seeing colors differently)
- Difficulty seeing in low light
- A central blind spot in your vision

## ### Diagnosis

To diagnose LHON, your doctor will:

1. \*\*Take a Medical History\*\*: Ask about your symptoms and family history of vision problems.
2. \*\*Eye Exam\*\*: Perform a thorough eye examination to check for changes in the optic nerve.
3. \*\*Genetic Testing\*\*: Conduct tests to look for specific mutations in mitochondrial DNA that are associated with LHON.

## ### Treatment

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

- \*\*Nutritional Supplements\*\*: Some studies suggest that certain vitamins (like B vitamins) may help protect the optic nerve.
- \*\*Vision Rehabilitation\*\*: If vision loss occurs, rehabilitation programs can help you adapt and make the most of your remaining sight.

## ### Follow-up Advice

If you are diagnosed with LHON, regular follow-up appointments with your eye doctor are essential to monitor your vision and overall health.

- \*\*Stay Informed\*\*: Learn about the condition and connect with support groups for people with LHON.
- \*\*Healthy Lifestyle\*\*: Maintain a healthy diet and avoid smoking, as these can impact your overall health.
- \*\*Family Planning\*\*: If you are considering having children, talk to a genetic counselor about the risks of passing LHON to your offspring.

If you notice any sudden