

Genetic Disorder Prediction Report

Patient Age: 11

Gender: Male

Predicted Disorder: Genetic Disorder

Subclass: Tay-Sachs

Date: 26-12-2025

Description:

Tay-Sachs Disease: A Patient-Friendly Overview

****Overview:****

Tay-Sachs disease is a rare genetic disorder that affects the nervous system. It is caused by a deficiency

****Causes:****

Tay-Sachs is inherited in an autosomal recessive pattern. This means that a child must inherit two copies

****Symptoms:****

Symptoms of Tay-Sachs typically appear in infants around 6 months of age and may include:

- Loss of motor skills (like crawling or sitting up)
- Increased startle response
- Seizures
- Vision and hearing loss
- Muscle weakness
- Cherry-red spot in the eye (visible during an eye exam)

As the disease progresses, children may experience more severe neurological decline, leading to significant

****Diagnosis:****

Tay-Sachs is diagnosed through a combination of:

- **Family history:** Understanding if there are any known cases in the family.
- **Blood tests:** These tests can measure the levels of the Hex-A enzyme. Low levels indicate Tay-Sachs.
- **Genetic testing:** This can confirm the presence of mutations in the HEXA gene.

****Treatment:****

Currently, there is no cure for Tay-Sachs disease. Treatment focuses on managing symptoms and providing

- Physical therapy to help maintain mobility
- Occupational therapy to assist with daily activities
- Medications to manage seizures
- Nutritional support

****Follow-Up Advice:****

If you or your family member has been diagnosed with Tay-Sachs or is a carrier, it's important to:

- Stay in touch with a healthcare provider who specializes in genetic disorders.
- Consider genetic counseling for family planning and understanding the risks for future pregnancies.
- Join support groups or organizations that provide resources and connect families affected by Tay-Sachs.

Remember, while Tay-Sachs is a serious condition, having a supportive healthcare team and community