

Genetic Disorder Prediction Report

Patient Age: 3

Gender: Male

Predicted Disorder: Genetic Disorder

Subclass: Cystic fibrosis

Date: 26-12-2025

Description:

Cystic Fibrosis: A Patient-Friendly Overview

Overview

Cystic fibrosis (CF) is a genetic disorder that affects the lungs and digestive system. It causes the body to

Causes

Cystic fibrosis is caused by a change (mutation) in a gene called CFTR (Cystic Fibrosis Transmembrane

Symptoms

Symptoms of cystic fibrosis can vary from person to person but often include:

- **Respiratory Issues:** Frequent coughing, wheezing, and difficulty breathing due to mucus buildup in the lungs.
- **Digestive Problems:** Difficulty digesting food, which can lead to poor growth and weight gain. This has been linked to a higher risk of diabetes.
- **Salty Sweat:** People with CF often have salty-tasting skin, which is a result of the body losing too much salt through sweat.
- **Frequent Lung Infections:** Due to mucus buildup, people with CF are more prone to lung infections.

Diagnosis

Cystic fibrosis is usually diagnosed through:

- **Newborn Screening:** Many places perform a test shortly after birth to check for CF.
- **Sweat Test:** This test measures the amount of salt in sweat. High levels of salt can indicate CF.
- **Genetic Testing:** A blood test can check for mutations in the CFTR gene.

Treatment

While there is currently no cure for cystic fibrosis, there are treatments that can help manage symptoms and improve quality of life.

- **Medications:** These may include antibiotics to treat lung infections, mucus thinners to help clear mucus from the airways, and enzymes to help with digestion.
- **Airway Clearance Techniques:** These are exercises or devices that help loosen and clear mucus from the airways.
- **Nutritional Support:** A high-calorie diet and vitamin supplements can help with growth and digestion.
- **Lung Transplant:** In severe cases where other treatments are no longer effective, a lung transplant may be considered.