

Genetic Disorder Prediction Report

Patient Age: 10

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 produce thick, sticky mucus that can clog the lungs and digestive tract.

Causes:

Cystic fibrosis is caused by a change (mutation) in a gene called the CFTR gene. This gene helps control the flow of salt and water in and out of cells.

Symptoms:

Symptoms of cystic fibrosis can vary from person to person, but common signs include:

- Persistent cough that produces thick mucus
- Frequent lung infections
- Difficulty breathing or wheezing
- Poor growth or weight gain despite a good appetite
- Difficulty digesting food, leading to greasy, bulky stools
- Salty-tasting skin (often noticed when kissing a child)

Diagnosis:

Cystic fibrosis is usually diagnosed through:

- **Newborn Screening:** Many babies are tested for CF shortly after birth using a blood test.
- **Sweat Test:** This test measures the amount of salt in sweat. People with CF have higher levels of salt in their sweat.
- **Genetic Testing:** A blood test can check for mutations in the CFTR gene to confirm the diagnosis.

Treatment:

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

- **Medications:** These can help thin mucus, reduce inflammation, and fight infections.
- **Chest Physiotherapy:** Techniques to help clear mucus from the lungs.
- **Nutritional Support:** Special diets, enzyme supplements, and vitamins to help with digestion and nutrition.
- **Lung Transplant:** In severe cases, a lung transplant may be considered.

Follow-Up Advice:

If you or your child has cystic fibrosis, regular follow-up with a healthcare team is essential. Here are some tips:

- **Regular Check-ups:** Schedule routine visits with your doctor to monitor lung function and overall health.
- **Stay Active:** Encourage physical activity, as it can help improve lung function.
- **Stay Informed:** Learn about CF and stay