GENETIC DISORDER REPORT
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Genetic Disorder: Mitochondrial genetic inheritance disorders
Subclass: Leigh syndrome

----- PATIENT DETAILS -----
patient_age: 50
father_age: 70
mother_age: 72
gender: Female
genes_mother_side: Yes
inherited_father: No
maternal_gene: Yes
paternal_gene: No
blood_cell_count: 5.54248
white_blood_cell_count: 4.9467
respiratory_rate: 40
heart_rate: 72
parental_consent: None
follow_up: None
birth_effects: None
folic_acid_intake: None
blood_test_result: Yes
No_of_previous_abortion: None

----- DESCRIPTION -----
Okay, let's break down Leigh Syndrome related to Mitochondrial genetic inheritance disorders in simple

Leigh Syndrome: Explained

Overview:

* Imagine your body's cells are like little power plants, and mitochondria are the engines inside those p
* It's like a progressive power outage in the brain, leading to a gradual loss of mental and movement a
* It usually shows up in infancy or early childhood, but sometimes it can appear later.
* It is an inherited disorder, meaning that the parents can pass the damaged mitochondrial genes on t

Causes:

* **Mitochondrial Malfunction:** The primary cause is a problem with the mitochondria's ability to creat
* **Genetic Inheritance:** Leigh syndrome can be caused by mutations in mitochondrial DNA (mtDNA)
    * **Mitochondrial DNA (mtDNA):** mtDNA is passed down only from the mother. So, if a mother has
    * **Nuclear DNA (nDNA):** nDNA is inherited from both parents. This form is more common. In thes
* In both cases, if the mitochondrial function is inhibited, the rest of the body suffers the consequences

Symptoms:

The symptoms of Leigh syndrome can vary from person to person, but they commonly include:

* **Developmental Delays:** Slow or stalled development milestones like sitting, crawling, or walking.
* **Muscle Problems:** Weakness (hypotonia), floppiness, stiffness, or difficulty controlling movements
* **Movement Problems:** Tremors, involuntary muscle contractions (dystonia), and difficulty with coo
* **Breathing Issues:** Irregular breathing patterns or episodes of apnea (stopping breathing).
* **Feeding Problems:** Difficulty swallowing, poor weight gain, and vomiting.
* **Vision Problems:** Abnormal eye movements (nystagmus) or vision loss.
* **Seizures:** Uncontrolled electrical activity in the brain.