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

----- PATIENT DETAILS -----
patient_age: 30
father_age: 70
mother_age: 70
gender: Female
genes_mother_side: No
inherited_father: Yes
maternal_gene: No
paternal_gene: Yes
blood_cell_count: 5.0888
white_blood_cell_count: 5000
respiratory_rate: 15
heart_rate: 73
parental_consent: Yes
follow_up: Medium
birth_effects: Yes
folic_acid_intake: Yes
blood_test_result: Abnormal
No_of_previous_abortion: 1

----- DESCRIPTION -----
Okay, let's break down Leigh syndrome, a type of mitochondrial disorder, into simple medical terms:

Leigh Syndrome: The Battery's Not Working Right

*   **Overview:** Think of your cells like little cities, each needing power to function. Mitochondria are lik

*   **Causes:**
    *   **Mitochondrial Problems:** The root cause is a problem with the mitochondria's ability to produce
    *   **Genetic Inheritance:** Leigh syndrome is most often inherited through genetic mutations.
        *   **Mitochondrial DNA (mtDNA):** Sometimes, the problem is in the DNA within the mitochondria
        *   **Nuclear DNA:** More commonly, the problem is in the DNA inside the cell's nucleus (nuclear
    *   **What Goes Wrong:** Because of these gene mutations, the mitochondria cannot produce enoug

*   **Symptoms:** The symptoms of Leigh syndrome can vary widely, even among people in the same f
    *   **Neurological Problems:**
        *   Developmental delays or regression (losing skills they had already learned)
        *   Muscle weakness
        *   Movement problems (like difficulty walking, coordination issues)
        *   Seizures
        *   Problems with vision (like nystagmus - involuntary eye movements)
        *   Swallowing and breathing difficulties
        *   Intellectual disability
    *   **Other Problems:**
        *   Vomiting
        *   Diarrhea
        *   Heart problems (cardiomyopathy)
        *   Kidney problems
        *   Failure to thrive (not gaining weight or growing properly)

*   **Risk Factors:**