

# GENETIC DISORDER REPORT

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Genetic Disorder: Mitochondrial genetic inheritance disorders

Subclass: Leigh syndrome

## ----- PATIENT DETAILS -----

patient\_age: 65

father\_age: 90

mother\_age: 90

gender: Female

genes\_mother\_side: Yes

inherited\_father: No

maternal\_gene: Yes

paternal\_gene: No

blood\_cell\_count: 6.824555

white\_blood\_cell\_count: 8000

respiratory\_rate: 16

heart\_rate: 78

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, focusing on the aspects you requested, and keeping it in under

### \*\*Leigh Syndrome: A Simple Explanation\*\*

\* \*\*Overview:\*\* Leigh syndrome is a severe, progressive neurological disorder that affects the central

\* \*\*Causes:\*\* The root of Leigh syndrome is a problem with \*\*mitochondria\*\*. Mitochondria are tiny str

\* Most Leigh syndrome cases are caused by genetic mutations (changes) that are passed down from

\* \*\*Mitochondrial DNA (mtDNA):\*\* This DNA is inherited \*only from the mother.\*

\* \*\*Nuclear DNA:\*\* This DNA is inherited from \*both parents.\*

\* There are dozens of different gene mutations that can cause Leigh syndrome.

\* In summary, it can be caused by a mutation in the mitochondrial DNA, which is inherited from the

\* \*\*Symptoms:\*\* Leigh syndrome symptoms vary, but generally include:

\* \*\*Developmental Delays/Regression:\*\* Loss of previously acquired skills (like crawling, walking, ta

\* \*\*Muscle Problems:\*\* Weakness, poor muscle tone (hypotonia), stiffness (spasticity), involuntary m

\* \*\*Movement Problems:\*\* Difficulty with coordination, balance, and walking (ataxia).

\* \*\*Breathing Problems:\*\* Irregular breathing patterns, rapid breathing (hyperventilation), or periods

\* \*\*Feeding/Swallowing Difficulties:\*\* Problems with sucking, swallowing, and gaining weight.

\* \*\*Vision Problems:\*\* Optic atrophy (damage to the optic nerve), nystagmus (involuntary eye move

\* \*\*Seizures:\*\*

\* \*\*Lactic Acidosis:\*\* A buildup of lactic acid in the body, which can cause vomiting, fatigue, and bre

\* \*\*Risk Factors:\*\*

\* \*\*Family History:\*\* Having a family history of Leigh syndrome or other mitochondrial disorders inc

\* \*\*Specific Genetic Mutations:\*\* Knowing that you carry a specific gene mutation associated with L