

MELAS

Mitochondrial Myopathy, Encephalopathy,
Lactic Acidosis, Stroke-Like Episodes

Is a mitochondrial disease primarily affecting the nervous system and muscles. It is caused by mutations in the mitochondrial DNA, that is inherited from the mother, as females are the parent who pass Mitochondrial DNA (mtDNA) onto their children.

Loss of appetite and recurrent vomiting

Seizures and recurrent headaches

Some may experience dementia or diminished ability to communicate

Stroke-like episodes with temporary muscle weakness on one side.

MELAS is one of the most common mitochondrial diseases, with an estimated incidence of 1 in 4000.



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mito**canada**



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Diagnosis Steps

MELAS is diagnosed based on clinical findings and molecular genetic testing.

1. Brain imaging techniques such as magnetic resonance imaging (MRI).
2. Muscle biopsy will usually show ragged red fibers.
3. The mtDNA mutations associated with MELAS can usually be detected in white blood cells.