

## **MELAS**

MELAS is a rare mitochondrial disorder. MELAS is an acronym that stands for mitochondrial encephlomyopathy, lactic acidosis, and stroke-like episodes. Muscle weakness and seizures may also be seen.



PLAY PICMONIC

### Characteristics

#### Mitochondrial Disease

### Damaged Mitochondria

Mitochondrial diseases are long-term, genetic, often inherited disorders that occur when mitochondria fail to produce enough energy for the body to function properly.

## Mnemonic

## Mitochondrial Encephalomyopathy

Mitochondria Altered brain Mayo-party-hat

The "ME" in MELAS stands for Mitochondrial Encephalomyopathy. Encephalomyopathies are rare genetic disorders causing neuromuscular junction dysfunction.

### **Lactic Acidosis**

Lake of Acidic-lemon

The "LA" in MELAS stands for Lactic Acidosis. Lactic acidosis is a form of metabolic acidosis that begins when a person overproduces or underutilizes lactic acid.

# Stroke-like Episodes

Stroke-crew TV-Episodes

The "S" in MELAS stands for "Stroke-like Episodes". These episodes mimic strokes but their pathophysiology is different than that of true vascular events. These episodes can present with unilateral muscle weakness, visual abnormalities, or confusion.

#### **Considerations**

### **Muscle Weakness**

Weak-drooping-muscle

Patients with MELAS often experience muscle weakness due to mitochondrial dysfunction.



### Seizures

Caesar

Patients with MELAS may experience seizures. A seizure is a sudden, uncontrolled electrical disturbance in the brain. It can cause changes in behavior, movements, feelings, and level of consciousness.