Kidney Transplantation in a Patient with MELAS: A Case Report and Review of the Literature on Medication Use

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Abstract

Mitochondria are responsible for generating cellular energy. Their function is particularly critical in high energy organ systems such as the nervous system, skeletal and cardiac muscles, kidneys, liver, and endocrine systems. When mutations occur in mitochondrial DNA, impaired energy production, microvasculature angiopathy, and nitric oxide deficiency can result. In such circumstances, patients may present with an array of multi-organ dysfunction including stroke like episodes, dementia, epilepsy, lactic acidemia, myopathy, recurrent headaches, hearing impairment, diabetes, and short stature.

Keywords: Mitochondria; Epilepsy; Dementia; Biopsy; Kidney transplant

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