MELAS SYNDROME:

THE IMPORTANCE OF

CONTINUING ARGININE IN ACUTE REHAB



PRESENTED BY: ALEXANDRA LAURENT, DO

Mount Sinai

BACKGROUND: A 38 Y/O M WITH SUSPECTED MELAS SYNDROME ADMITTED FOR COGNITIVE DECLINE AND SEIZURES. THE GENETICS TEAM STARTED HIM ON COQ10, RIBOFLAVIN, AND AN L-ARGININE INFUSION IN NEURO- ICU WHICH IMPROVED HIS CLINICAL STATUS. HE WAS DISCHARGED TO ACUTE REHAB ON THESE ORAL MEDICATIONS, HOWEVER DUE TO DIFFICULTIES OBTAINING ARGININE HE DID NOT CONTINUE IT.

FUNCTIONAL OUTCOMES WERE MEASURED BY:



COGNITION



STRENGTH



TRANSFERS



GAIT



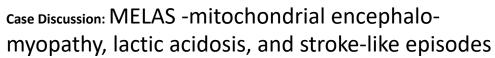
STAIRS



VISION

ABSENCE OF **ARGININE** CAN REVERSE FUNCTIONAL GAINS IN ACUTE REHAB





-Symptoms include muscle weakness, ataxia, and even cognitive impairments

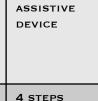
It is thought that these patients can benefit from Arginine to manage the stroke like episodes since it is a precursor to nitric oxide, which acts as a vasodilator, and thus increases cerebral perfusion.

It was proposed that this patient's suspected underlying genetic disorder coupled with medication noncompliance contributed to his decline during his acute rehabilitation admission. Therefore, a better understanding of MELAS and the treatments could have prevented the patients clinical decline and ultimate transfer out.

This case serves as an opportunity to review the literature on MELAS syndrome to highlight the important clinical characteristics and pathophysiology. A better understanding of the disease will help better serve our patients and could reduce complications and rehospitalizations.

ORIEN TO PE PLACE YEAR	RSON
LOWE	R AND R EMITIES
CONT. GUAR ASSIS	D
100 F WITHO ASSIS DEVICE	OUT TIVE
4 STE WITH HAND AND CONTA GUAR ASSIS	RAILS ACT D
No vi	

EXAM



ADMISSION

DISCHARGE

ORIENTED TO

TO NSICU

PERSON

PLACE

LOWER

ROLLING

MINIMUM

ROLLING

WALKER,

MINIMUM

MAXIMUM

ASSIST AND

ASSIST

WALKER WITH

100 FT WITH

4-/5

EXTREMITIES

DISCHARGE

ORIENTED TO

UPPER AND

EXTREMITIES

LOWER

ROLLING

CONTACT

ROLLING

WALKER WITH

GUARD ASSIST

75FT X2 WITH

WALKER AND

MINIMUM TO

NOT TESTED

(DISCHARGED

TO DIFFERENT

ACUTE REHAB)

MODERATE

ASSIST

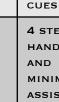
5/5

PERSON,

PLACE,

YEAR

FROM NSICU







No VISUAL **DEFICITS**