Newcastle Mitochondrial Centre

At a glance guidelines:

Epilepsy in Adult Mitochondrial Disease

For full guideline visit:
http://www.newcastle-mitochondria.com/service/patient-care-guidelines/

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There are many different forms of mitochondrial disease, varying greatly in their genetic basis, clinical presentation, progression and prognosis. We recommend referral to a specialist mitochondrial centre for appropriate counselling and guidance (www.mitochondrialncg.nhs.uk or see appendix for international centres).
Epilepsy may be a prominent feature of some forms of mitochondrial disease. We therefore recommend the following:

1. The diagnosis of epilepsy is best made by a neurologist or other epilepsy specialist as recommended in the SIGN guidelines.
2. Classification: the seizure type(s) and epilepsy syndrome should be identified if possible and may influence the choice of anti epileptic drug (AED).
3. Epilepsy in patients with mitochondrial disease should be treated actively from the outset, in order to minimize subsequent cerebral damage related to frequent or intractable seizures.
4. Non-convulsive status epilepticus should be actively excluded in the obtunded patient.
5. Potential precipitants (eg infection, dehydration, metabolic derangements) should be sought and treated.
6. Comorbidities (eg cardiomyopathy, ileus) should be considered, particularly in the ITU patient.
7. Sodium valproate should be avoided where possible and especially in patients who might carry POLG mutations due to potential fulminant hepatoxicity.