

Newcastle Mitochondrial Centre

At a glance guidelines:

Peripheral Neuropathy 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 assessment (www.mitochondrialncg.nhs.uk). Many have the potential for peripheral neuropathy/neuronopathy.

Reversible/treatable causes should be screened for in all cases. We therefore recommend the following:

1. Nerve conduction studies and electromyography should be performed in all patients with symptoms or signs suggestive of a peripheral neuropathy, entrapment neuropathy, or neuronopathy.
2. Routine blood screens should include a fasting blood glucose, glycosylated haemoglobin, full blood count, erythrocyte sedimentation rate, vitamin B12 and folate, urea and electrolytes, creatinine, liver function tests, auto-antibodies, extractable nuclear antigens, serum (and urine) electrophoresis.
3. Chest X-ray should be performed.
4. Patient's nutritional status should be optimised wherever possible.
5. Drugs/toxins - appropriate enquiries should be made for agents known to cause neuropathies.
6. All patients should have advice to avoid complications and access to local podiatry services.

7. Occupational therapy, physiotherapy and orthotics (eg foot drop splints) should be considered.

8. There is currently no evidence of benefit from drugs or vitamin supplements in mitochondrial neuropathies. There are no contraindications to the usual treatments for neuropathic pain. However, sodium valproate should not be used for this purpose due to potential toxicity.