Probable Mild Axonal Peripheral Neuropathy
Advice for initial management in primary care

Dept Clinical Neurosciences, NHS Lothian. Feb 2020

Please note this is only designed as a brief summary of management

Based on UpToDate 2020 and Overell J. Practical Neurology 2011; 11:62-70, More information at www.refhelp.scot.nhs.uk/

Peripheral Neuropathy

Peripheral neuropathy has a long list of causes, some of which are treatable such as diabetes, toxic or autoimmune disorders. Others are useful to identify such as genetic causes, even if there is no treatment currently. In practice however, a large proportion of peripheral neuropathic symptoms are either not due to an identifiable peripheral neuropathy or a consequence of axonal degeneration, especially in older people in the elderly. These patients usually follow a benign course, do not become disabled, and often don't need to see a neurologist. This fact sheet is directed at providing information for this group to support their management in primary care. It is not a substitute for detailed information about peripheral neuropathy or causes of lower limb numbness.

Is tingling in the feet usually peripheral polyneuropathy?

Sometimes, but there are many other causes. ***Lumbosacral radiculopathy*** commonly causes paraesthesia in the feet as does ***compression of the peroneal nerve at the fibular head***. People with ***restless legs syndrome*** commonly complain of burning feet and individuals who ***hyperventilate*** may experience intermittent paraesthesia in their feet. Neuropathies tend to cause persistent (if variable) symptoms, not intermittent. If people can identify times when their extremities are normal, a neuropathy is unlikely. Intermittent sensory symptoms are common in the normal population.

Which groups of patients can be managed in primary care with suspected peripheral neuropathy WITHOUT needing to see a neurologist?

Over the age of 60, around one third of people lose vibration sense at the big toe and around 20% of people lose their ankle reflexes. Around 13% of the UK population over the age of 80 probably have some degree of polyneuropathy – nearly all axonal. We cannot and do not need to see all these individuals so it's a case of doing what is reasonable and providing sensible advice. Patients with the following features can ***usually*** be managed conservatively in primary care.

- Symmetrical
- Distal sensory loss only
- No gait disturbance
- Normal neurological examination or only minimal features (e.g. reduced vibration sense at toes)
- Only very slowly progressive
- Over the age of 75

This is just a guide and it is difficult to make hard and fast rules. Please seek our advice if unsure.

Which blood tests should these patients have?

- U&E, FBC, LFTs, TFTs, ESR
- Blood Glucose.
- Vitamin B12
- Protein Electrophoresis and serum immunoglobulins

What should I tell my patients if I am NOT referring them?

In an older person with mild sensory distal symptoms as above who you have already investigated, we suggest:

- ***Consider treating low normal B12*** (e.g. in range 200-500pg/dl) with replacement therapy
- ***Advise the patient that disability is unlikely***. '*This is common in the population. Its annoying but is unlikely to progress and cause disability*' . Most people with peripheral neuropathy present because they are worried that the problems are going to progress to cause disability and loss of independence. Studies following people for 10 years do not show disability or problems walking
- ***Review for progression***. *"Come back and see me if problems are worsening or causing mobility problems"*

Should I try neuropathic pain medication (e.g. tricyclics, gabapentinoids, duloxetine) for pins+needles/tingling?

Generally, NO. These agents have side effects. They may be useful in moderate to severe symptoms where pain is the issue, but they rarely help other non-painful sensory symptoms.

What if this doesn't give me confidence to manage in primary care?

Then let us know and we would be happy to advise

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