

## Neuropathy

- A significant percentage of neuropathies are caused by underlying conditions (eg diabetes) or treatments.
- Commonly, however, no underlying cause is able to be identified.
- Symptoms are highly variable, especially sensory symptoms.
- Depending on the clinical features, peripheral neuropathy can be broadly classified as **polyneuropathy** (diffuse involvement, usually beginning distally), **mononeuropathy** (single nerve involvement), **mononeuritis multiplex** (focal involvement of 2 or more nerves), **plexopathy** (involvement of brachial or lumbosacral plexus) or **neuronopathy** (involvement of nerve cell body rather than its axon)

### Differential based on clinical time course

- **Acute** (days)
  - Guillain-Barre syndrome
  - Acute intermittent porphyria
  - Critical illness polyneuropathy
  - HIV
- **Subacute** (weeks to months)
  - Exposure to toxins/medications
  - Nutritional deficiency (eg B12)
  - Metabolic derangements (eg DM)
  - Paraneoplastic syndrome
  - CIDP (chr inflam demyelinating polyneurop)
  - MGUS (monoclonal gammopathy of uncertain significance)
- **Chronic or insidious** (years)
  - Hereditary neuropathy
  - Metabolic derangements (eg DM)
  - HIV
  - CIDP
  - MGUS
- **Relapsing/remitting course**
  - CIDP
  - Acute intermittent porphyria
  - Toxin exposure
  - HIV

### Information Required

- Presence of Red flags
- Duration
- Prior medical history
- Current, and any relevant prior medications
- Alcohol intake
- Family history of neuropathy
- Relevant examination findings

### Investigations Required

- FBE, EUC, LFTs, fasting glucose, B12, folate, CRP, ANA, ENA, serum and urine electrophoresis

### Fax Referrals to Neurology

- Flinders Medical Centre Fax: 8204 4059

*On the basis of the information provided, the patient will be triaged to consultation only, nerve conduction studies initially, or consultation and nerve conduction studies.*

### Red Flags

- 🚩 Acute onset (**refer to ED for assessment**)
- 🚩 Progressive symptoms and signs (days – weeks)
- 🚩 Sphincter disturbance (cord pathology likely)
- 🚩 Associated respiratory compromise

### Suggested GP Management

- Perform suggested investigations
- Unless a direct cause can be identified and corrected, only symptomatic treatment can be offered with membrane stabilizing agents such as amitriptyline, carbamazepine or pregabalin

### Clinical Resources

- Reference: Williams, O. Medlink. Clinical evaluation of peripheral neuropathies (updated October 2010).

<b>Version</b>	<b>Date from</b>	<b>Date to</b>	<b>Amendment</b>
2.0	September 2016	October 2018	Removed RGH details
2.0	October 2019	October 2021	No changes
3.0	December 2022	December 2024	Fax number updated