Neuropathy

- A significant percentage of neuropathies are caused by underlying conditions (e.g., 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 (e.g., B12)
  - Metabolic derangements (e.g., DM)
  - Paraneoplastic syndrome
  - CIDP (chronic inflammatory demyelinating polyneuropathy)
  - MGUS (monoclonal gammopathy of uncertain significance)
- **Chronic or insidious** (years)
  - Hereditary neuropathy
  - Metabolic derangements (e.g., 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: 8374 4928

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