

Appendix 1. Clinical evaluation of patients with suspected neuropathic pain

History

Pain intensity

- 0-10 rating scale (0 = no pain, 10 = worst pain imaginable)
- Rate pain at initial presentation and at subsequent visits to track treatment response

Sensory descriptors

- Pain qualities: hot, burning, sharp, stabbing, cold, allodynia (pain brought on by light touch, clothing, or bed sheets)
- Common nonpainful sensations: tingling, pricking, itching, numbness, and “pins and needles”

Temporal variation

- Neuropathic pain often gets worse towards the end of the day
- Neoplastic process should be suspected if pain has been progressively increasing over recent months

Functional impact

- Effect of pain on sleep, ambulation, self-care, activities of daily living, work, social or sexual function, mood, and suicidal ideation

Attempted treatments

- Neuropathic pain is generally resistant to acetaminophen and NSAIDs
- Determine and document adequacy of dose titration for titratable drugs (e.g. dose reached and duration of treatment, drug treatment stopped owing to adverse effects or lack of efficacy)

Alcohol or substance abuse

- Addiction history will affect decision to prescribe opioids or cannabinoids
- Consider earlier involvement with a psychologist or psychiatrist
- Consider safety of sedative analgesics with alcohol or other sedatives

Physical examination

Gross motor examination

- Motor weakness may occur around the involved nerves
- Attempt to differentiate between true weakness and antalgic weakness

Deep tendon reflexes

- May be diminished or absent around the involved nerves

Sensory examination

- Light touch, pinprick, vibration sense, and proprioception may be diminished or absent in the involved nerve territory
- Sensory disturbance may aberrantly extend beyond a discrete nerve territory
- Dynamic allodynia (pain due to cotton wool lightly moving across the skin)
- Thermal allodynia (burning sensation in response to ice cube on skin)
- Pinprick hyperalgesia (exaggerated pain following pinprick to the skin)
- Pain when straight leg is raised, suggestive of irritation or lumbar nerve root
- Elicitation of myofascial trigger points to favour a diagnosis of myofascial pain over neuropathic pain
- Possible presence of Tinel's sign (distally radiating paresthesias upon percussion of damaged or regenerating nerve fibres)

Skin examination

- Alterations in temperature, colour, sweating, and hair growth suggestive of complex regional pain syndrome
- Residual dermatomal scars consistent with previous herpes zoster (shingles) infection
- Characteristic skin changes consistent with diabetes mellitus

Special tests

CT and MRI scans

- Facilitate specific diagnosis (e.g., herniated disc, nerve infiltration by tumour)

Electromyography and nerve conduction studies

- May provide objective evidence of nerve injury or dysfunction
- Nerve conduction studies evaluate large fibre function; therefore, small fibre neuropathy cannot be ruled out if results of nerve conduction studies are normal

Three-phase nuclear medicine bone scan

- May help diagnose complex regional pain syndrome

Clinical biochemistry

- Conduct tests to help identify cause of neuropathy; for example, glucose tolerance testing, thyroid function, measurement of vitamin B₁₂ levels, CD4+ T-lymphocyte count

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