LOCALIZED NEUROPATHIC PAIN SCREENING TOOL

This Screening Tool facilitates your daily practice, as it:

• Focuses on chronic pain patients
• Facilitates the diagnosing of Neuropathic Pain
• Allows for specifying Localized Neuropathic Pain as a type of Neuropathic Pain
### Presenting complaint: Pain

<table>
<thead>
<tr>
<th></th>
<th>Presenting complaint: Pain</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Does the patient’s history suggest a relevant nerve lesion or disease?</td>
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<td>2.</td>
<td>Is the pain distribution neuroanatomically plausible?</td>
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<tr>
<td>3.</td>
<td>Does the neurological examination reveal any negative or positive sensory sign in the area of the presumably lesioned nerve?</td>
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<td>4.</td>
<td>Is the most painful area circumscribed and smaller than an A4 paper?</td>
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</tbody>
</table>

1. **3 x yes ➔ at least probable Neuropathic Pain**

2. **4 x yes ➔ at least probable Localized Neuropathic Pain**

*also see detailed algorithm on page 7
1. HISTORY
Does the patient's history suggest a relevant nerve lesion or disease?

Three common examples

- **Post-herpetic neuralgia**
  - Infection (Herpes Zoster)

- **Metabolic diseases**
  - Diabetes Mellitus /
  - Renal failure /
  - Hypothyroidism

- **Traumatic nerve lesion**
  - Trauma or surgery /
  - Limb amputation /
  - Nerve compression syndromes
2. ANATOMY
Is the pain distribution neuroanatomically plausible?

Painful symptoms and sensory alterations

Greater occipital n.
Lesser occipital n.
Great auricular n.
Anterior cut. n. of neck
Axillary n. (circumflex)
Post. cut. n. of arm
Lower lat. cut. n. of arm
Med. and lat. cut. n. of forearm
Post. cut. n. of forearm
Iliohypogastric n.
Lumbar and sacral postrami
Ulnar n.
Radial n.
Median n.
Post. cut. n. of thigh
Lat. cut. n. of thigh
Lat. cut. n. of calf
Sural n.
Superficial peroneal n.
Lat. calcaneal n.
Sural n.

Supraclavicular n.
Intercostal n.
Med. cut. n. of arm
Lat. and med. cut. n. of forearm
Iliohypogastric n.
Ilioinguinal n.
Lumbo-inguinal n.
Genital br. of genitofemoral n.
Dorsal n. of penis
Scrotal br. of perineal n.
Obturator n.
Intermediate cut. n. of thigh
Saphenous n.
Med. plantar n.
Med. calcanean n.
Med. and lat. plantar n.

Innervation territories of peripheral nerves

Dermatomes
3. TESTS: SENSORY EXAMINATION

Does the neurological examination reveal any negative or positive sensory sign in the area of the presumably lesioned nerve?

**Touch**
- Q-tip (cotton swap)

**Pinprick**
- Safety pin
- Tooth pick

**Vibration**
- Tuning fork 128 Hz

**Cold/ Heat**
- NaCl bottle in fridge / water tubes / reflex hammer / stethoscope

**Pressure**
- Syringe / Pencil
- Monofilament

Start testing with a body region which is located far away from the painful body regions (e.g. hand in case of pain/symptoms in feet and contralateral limb or region in unilateral lesion) as baseline.

Test area = area of maximum pain as indicated by the patient (if < A4 paper = localized pain)

Repeat every stimulation three times

Grade response as normal, decreased or increased (quantitative response)

Ask the patient immediately after the last of each stimulation to rate the pain by using the 4-item pain scale
- 0 = no pain/ discomfort to touch
- 1 = uncomfortable but tolerable to touch
- 2 = painful
- 3 = extremely painful, patient cannot stand touching
4. SIZE OF PAINFUL AREA
Is the pain area circumscribed and smaller than an A4 paper?

FURTHER ETIOLOGICAL TESTS MAY BE CONSIDERED

In case of a progressing disease, please refer immediately to a specialist without waiting for laboratory test or images.

Consider previous medical treatments as possible etiologies for NP:
- Radiotherapy
- Chemotherapy
- Surgery/Trauma
- Others, such as antibiotics

Consider individual aspects of your patient:

Overview of Lab tests:
- Blood glucose level (+/- HbA1c)
- Glucose tolerance test
- Creatinine
- Thyroid hormones
- HIV serology
- Inflammatory parameters
- Liver enzymes
- Urea
- Others

Other tests: consider referral to specialist, imaging and neurophysiological tests:
- Ultrasound
- X-ray (LBP)
- MRI
- EMG & nerve studies

For treatment options please, refer to the local guidelines.
Consistent and circumscribed area(s) of maximum pain (< A4 paper)

Pain is unlikely to be neuropathic pain

Definite neuropathic pain

Probable neuropathic pain

Localized Neuropathic Pain: LNP

Examples of symptoms or pain descriptors

Burning, stabbing, shooting, electric shocks, pins and needles, tingling, pressure and others.
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