LEEDS ASSESSMENT OF NEUROPATHIC SYMPTOMS AND SIGNS (LANSS)

ENGLISH (ORIGINAL VERSION)

Bibliographic and contact information for questionnaire

Reference

Bennett M. The LANSS pain scale: the Leeds assessment of neuropathic symptoms and signs. Pain 92: 147-157, 2001.

PubMed identifier (PMID): http://www.ncbi.nlm.nih.gov/pubmed/11323136

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Properties of the questionnaire

Language

English

Purpose

Diagnostic/screening: To identify whether pain is likely to be neuropathic in origin.

Assessment

SYMPTOMS:

Five items addressing pain quality and pain triggers

SIGNS:

Two sensory function tests (requires a suitably trained person to administer the instrument)

- Dynamic mechanical allodynia (light brushing)
- Altered pin-prick threshold

Scoring system

Responses to all seven items (five symptoms and two signs) are binary ('yes' or 'no'). Responses are weighted according to the odds ratio for each item when predicting whether pain is neuropathic in origin. Weighted scores for the five symptom items and two sensory tests are summed, giving a total score from 0 to 24. The scoring system was established in a tool development study that preceded the LANSS validation study, and which is described in the same publication as the validation study (Bennett et al. Pain 92: 147-157, 2001).

Scoring direction

Score < 12 indicates that the pain is <u>unlikely</u> to be neuropathic in origin

Score ≥ 12 indicate that the pain is <u>likely</u> to be neuropathic in origin

Validation population

Forty (40) chronic pain patients diagnosed either with neuropathic (n = 20) or nociceptive (n =20) pain were recruited from a chronic pain management service. There were no significant differences between the groups with respect to age, sex ratio, number of patients with malignancy, and ratings of pain intensity and frequency. Participants were administered the questionnaire twice, once by the investigator and once by a clinician.

Psychometric properties

Diagnostic validity (using a threshold score ≥ 12)

Sensitivity: 85%

Specificity: 80%

Positive predictive value: 81%

Negative predictive value: 84%

Construct validity

All individual questionnaire items were positively associated with a clinical diagnosis.

Convergent/criterion validity

Not assessed

Reliability

Inter-rater reliability: Good agreement between raters for overall classification of pain type based on LANSS score (Cohen's kappa coefficient = 0.65) and individual items on the scale (Cohen's kappa coefficient values ranged between 0.6 and 0.88).

Internal consistency: Good (Cronbach's alpha = 0.74)

Validation studies for specific pain conditions

CANCER PAIN:

Potter J, Higginson IJ, Scadding JW, Quigley CW. Identifying neuropathic pain in patients with head and neck cancer: use of the Leeds Assessment of Neuropathic Symptoms and Signs Scale. J R Soc Med 96: 379-383, 2003.

PMID: http://www.ncbi.nlm.nih.gov/pubmed/12893852

LOW-BACK PAIN:

Kaki AM, El-Yaski AZ, Youseif E. Identifying neuropathic pain among patients with chronic low-back pain: use of the Leeds Assessment of Neuropathic Symptoms and Signs pain scale. Reg Anesth Pain Med 30: 422-448, 2005.

PMID: http://www.ncbi.nlm.nih.gov/pubmed/16135345

SPINAL CORD INJURY: (SWEDISH VERSION OF LANSS – **NOTE: LOW SENSITIVITY**)

Hallström H, Norrbrink C. Screening tools for neuropathic pain: can they be of use in individuals with spinal cord injury? Pain 152: 772-779, 2011.

PMID: http://www.ncbi.nlm.nih.gov/pubmed/21272997

Additional information

USED PROSPECTIVELY AS A MEASUREMENT TOOL:

Khedr EM, Kotb H, Kamel NF, Ahmed MA, Sadek R & Rothwell JC. Long-lasting antalgic effects of daily sessions of repetitive transcranial magnetic stimulation in central and peripheral neuropathic pain. J Neurol Neurosurg Psychiatry 76: 833-838, 2005.

PMID: http://www.ncbi.nlm.nih.gov/pubmed/15897507