LEEDS ASSESSMENT OF NEUROPATHIC SYMPTOMS AND SIGNS (LANSS)

SWEDISH TRANSLATION (tested in spinal cord injury patients)

Bibliographic information for original (English) questionnaire

Bibliographic information for translated (Swedish) questionnaire
Reference

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Properties of the translated questionnaire
Purpose
Diagnostic/screening: To identify whether pain is likely to be neuropathic in origin in patients with spinal cord injury.

Language
Swedish

Translation process:
Duplicate forward and reverse translation, with consensus discussions after each phase of translation. Forward translation from the original French version of the DN4 was by two native Swedish speaking translators, one of whom was aware of the objective and concept of the tool and the study. Reverse translation was by two native French speaking translators.

Changes from original questionnaire:
None
Translation and validation: Swedish LANSS (spinal cord injury)

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 of each item when predicting whether a pain is neuropathic in origin (based on the original LANSS validation by Bennet et al. Pain 92: 147-157, 2001). Weighted scores for the five symptom items and two sensory tests are summed, giving a total score from 0 to 24.

Scoring direction
Score < 12 indicates that the pain is unlikely to be neuropathic in origin
Score ≥ 12 indicate that the pain is likely to be neuropathic in origin

Validation population
Forty (40) Swedish-speaking spinal cord injury patients (of at least one year), who had pain for at least six months, and the pain was at least 3 on a 0-10 numerical pain rating scale were recruited to the study. Pain was clinically diagnosed as being neuropathic in 28 patients and non-neuropathic in 12 patients. Participants were assessed twice using the tool, by independent assessors.

Psychometric properties

Diagnostic validity (using a threshold score ≥ 12)
Sensitivity: 35.7%
Specificity: 100%
Agreement with clinical diagnosis: 55%
Receiver-operating characteristic (ROC): Area under the curve (AUC) = 0.78

Explorative analysis identified that a threshold score of ≥ 4 yielded specificity of 85.7%, sensitivity of 50% and an agreement with clinical diagnosis of 75%.
Translation and validation: Swedish LANSS (spinal cord injury)

Construct validity
No questionnaire items were associated with a clinical diagnosis of neuropathic pain

Convergent/criterion validity
Not assessed

Reliability
Test-retest reliability: Very good (Cohen’s kappa coefficient = 1)

Validation studies of translated questionnaire for specific pain conditions
n/a

Additional information
n/a