

**SELF-REPORT LEEDS ASSESSMENT OF NEUROPATHIC SYMPTOMS AND SIGNS
(S-LANSS)**

ENGLISH (ORIGINAL VERSION)

Bibliographic and contact information for questionnaire

Reference

MI Bennett, BH Smith, Torrance N & J Potter. The S-LANSS score for identifying pain of predominantly neuropathic origin: Validation for use in clinical and postal research. *Journal of Pain* 6: 149-158, 2005.

PubMed identifier (PMID): <http://www.ncbi.nlm.nih.gov/pubmed/15772908>

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Properties of the questionnaire

Language

English

Purpose

Screening: Self-identification of pain of neuropathic origin for use in epidemiological studies

Assessment (self-report instrument)

SYMPTOMS:

Two items addressing pain distribution and intensity

Five items addressing pain quality and pain triggers

SIGNS:

Two sensory function tests (self-administered)

- Dynamic mechanical allodynia (lightly rubbing skin with finger)
- Static mechanical allodynia (pressing on skin with finger)

Scoring system

Responses to seven items (five pain quality and pain trigger items, 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

VALIDATION: ENGLISH (ORIGINAL) S-LANSS

Bennett 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 \geq 12 indicate that the pain is likely to be neuropathic in origin

Validation population

CLINIC-BASED STUDY

Two-hundred (200) patients clinically diagnosed with neuropathic (n = 100) or nociceptive (n = 100) pain were recruited from a chronic pain service. Patients diagnosed with nociceptive pain were older (mean age = 59 years) than those with neuropathic pain (mean age = 51 years), but there were no significant difference in sex ratio between the groups. Median pain rating was similar in both groups, and generally was rated as severe (8 on an 11-point numerical pain rating scale). Participants completed the S-LANSS unaided (unaided completion) and then in the company of a research assistant (aided completion).

POSTAL SURVEY

The S-LANSS and the Neuropathic Pain Scale (NPS) was posted to 160 adults from a general practice population in Aberdeen, UK (stratified for age and sex), and 150 adults selected consecutively from the waiting list of a chronic pain service. 174 of 310 questionnaires were returned completed (89 of 160 and 85 of 150). There were no significant differences in age or sex ratio between non-respondents and respondents in either cohort. Completion rates for individual S-LANSS items in returned questionnaires ranged from 95% and 99%.

Psychometric properties

CLINIC-BASED STUDY

Unaided completion of questionnaire:

Diagnostic validity (using a threshold score \geq 12)

Sensitivity: 74%

Specificity: 76%

Positive predictive value: 76%

Negative predictive value: 75%

Agreement with clinical diagnosis: 75%

VALIDATION: ENGLISH (ORIGINAL) S-LANSS

Construct validity

All individual questionnaire items were positively associated with overall S-LANSS score and clinical diagnosis.

Convergent/criterion validity

Individual questionnaire items correlated positively with items scores on the Neuropathic Pain Scale (NPS).

Reliability

Internal consistency: Good (Cronbach's alpha = 0.76)

Aided completion of questionnaire:

Diagnostic validity (using a threshold score ≥ 12)

Sensitivity: 74%

Specificity: 89%

Positive predictive value: 71%

Negative predictive value: 76%

Agreement with clinical diagnosis: 73%

Construct validity

All individual questionnaire items were positively associated with overall S-LANSS score and clinical diagnosis.

Convergent/criterion validity

Not assessed

Reliability

Internal consistency: Good (Cronbach's alpha = 0.81)

POSTAL SURVEY

Diagnostic validity

Not assessed

Construct validity

Not assessed

VALIDATION: ENGLISH (ORIGINAL) S-LANSS

Convergent/Criterion validity

S-LANSS demonstrated convergent validity with the Neuropathic Pain Scale (NPS), which was used as a proxy measure of neuropathic pain in the absence of a clinical diagnosis.

Reliability

Internal consistency: Good (Cronbach's alpha = 0.80)

Validation studies for specific pain conditions

None

Additional information

None