Background: Neuropathic pain (NP) is a very frequent and unrecognized condition in clinical practice. Therefore it is important to have a reliable instrument to assess pain complaints in various cultures. The Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) has been widely used and validated in many countries. To date there has been no reliability study of this instrument in Brazil. Methods: The scores of the Brazilian Portuguese version of the LANSS were studied in a sample of 90 chronic pain outpatients from southern Brazil. The LANSS was translated into Portuguese and then back translated to English. Test-retest and internal consistency were estimated. The intensity of pain complaints and other demographical data were also evaluated. Results: The Brazilian Portuguese version of the LANSS showed good intraclass correlation coefficient (r =0.85). Internal consistency was also good (Cronbach’s α 0.70 for total LANSS score). Patients with neuropathic pain provided higher LANSS scores in comparison with those with nociceptive and mixed types of pain. Patients with low level education had higher LANSS scores in comparison with those with high education levels. Conclusions: This LANSS version was found to be a reliable instrument for the evaluation of pain complaints due to a variety of causes. The profile of pain scores was similar to that observed in other countries. Low level of education may have biased some patient’s answers towards to neuropathic pain.