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### Nocturnal leg cramps: Diagnosing, therapy and associations with other sleep related movement disorders

**Background:** Nocturnal leg cramps (NLC) is a high prevalent painful musculoskeletal disorder characterized by suddenly occurring, episodic, painful, sustained, and involuntary contractions of calf, hamstrings or foot muscles during the night. Sleeping disturbances and distress may be common in patients with NLC and may seriously affect quality of life. Clinicians in daily practice do not commonly identify clinical characteristics of this sleep related motor disorder, because other sleep or rest related motor disorders are not ruled out. Cause and aetiology of NLC is not fully known and diagnosing is often confused with other sleep related motor disorders such as restless legs syndrome and periodic limb movement disorder. Besides, inconsistent evidence exists about therapy of NLC. Two research questions must be answered:

To identify all evidence based valid criteria with respect to diagnosing nocturnal leg cramps and which conditions must be rule out. Can a pre-sleep stretching regimen be effective in preventing nocturnal leg cramps and decrease frequency and severity of cramps?

**Methods:** A comprehensive systematic literature search has been executed 1990 up till now.

In a six-week period, the experimental group performed a nightly pre-sleep stretching regimen of the calf and hamstrings muscles immediately before going to sleep.

**Results:** The included and reviewed studies revealed a total of ten diagnostic criteria.

At six weeks frequency and severity of nocturnal leg cramps decreased both significantly in the experimental group.

**Conclusion:** There is evidence for clinical diagnosing of nocturnal leg cramps and nightly stretching before going to sleep is effective on frequency and severity of NLC.

### Biography

Joannes M Hallegraeff has completed his PhD as Clinical Epidemiologist from University of Groningen, the Netherlands. He is researcher, lecturer and coordinator of the Lifelong Learning musculoskeletal program at SOMT University, The Netherlands. His field of interest is twofold: Nocturnal leg cramps in older adults and non-specific low back pain. He has published in Journal of Physiotherapy on nocturnal leg cramps and a recent systematic review about diagnosing nocturnal leg cramps is submitted.

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