

BACKGROUND:

Increasing evidence links restless legs syndrome (RLS) with peripheral neuropathy (PN). The absence of PN is essential in the diagnosis of idiopathic RLS, but routine neurophysiological tests are not included. Moreover, it seems that central sensitization might be involved in the pathophysiological explanation of RLS. Nevertheless, few studies explore the presence of hyperalgesia in RLS patients.

METHODOLOGY:

53 RLS patients were included. We analyzed demographic and clinical data of RLS patients and conducted nerve conduction studies and quantitative sensory tests.

CONCLUSIONS:

- 1) Moderate-severe RLS is associated with PN, detected in 63% of our patient population.
- 2) In RLS-PN patients, both small and myelinated fibres are affected and sensitive axonal type is the most common pattern.
- 3) Some clinical “neuropathic RLS” manifestations might be identified: absence of family history of RLS, simultaneous symptoms of RLS in feet and legs, presence of other neuropathic manifestations, rapidly progressive pattern, male predominance and late onset.
- 4) Thermal hyperalgesia was found in nearly 70% of our patients with a female and old-age predominance.
- 5) Thermal hyperalgesia is not associated with PN, therefore in RLS a functional impairment of central somatosensory processing might be present.