Sensory symptom profiles and co-morbidities in painful radiculopathy.

Abstract:

Painful radiculopathies (RAD) and classical neuropathic pain syndromes (painful diabetic polyneuropathy, postherpetic neuralgia) show differences how the patients express their sensory perceptions. Furthermore, several clinical trials with neuropathic pain medications failed in painful radiculopathy. Epidemiological and clinical data of 2094 patients with painful radiculopathy were collected within a cross-sectional survey (painDETECT) to describe demographic data and co-morbidities and to detect characteristic sensory abnormalities in patients with RAD and compare them with other neuropathic pain syndromes. Common co-morbidities in neuropathic pain (depression, sleep disturbance, anxiety) do not differ considerably between the three conditions. Compared to other neuropathic pain syndromes touch-evoked allodynia and thermal hyperalgesia are relatively uncommon in RAD. One distinct sensory symptom pattern (sensory profile), i.e., severe painful attacks and pressure induced pain in combination with mild spontaneous pain, mild mechanical allodynia and thermal hyperalgesia, was found to be characteristic for RAD. Despite similarities in sensory symptoms there are two important differences between RAD and other neuropathic pain disorders: (1) The paucity of mechanical allodynia and thermal hyperalgesia might be explained by the fact that the site of the nerve lesion in RAD is often located proximal
to the dorsal root ganglion. (2) The distinct sensory profile found in RAD might be explained by compression-induced ectopic discharges from a dorsal root and not necessarily by nerve damage. These differences in pathogenesis might explain why medications effective in DPN and PHN failed to demonstrate efficacy in RAD.