**Table 1.** Sociodemographic and clinical characteristics of patients wit diabetic peripheral neuropathy with and without neuropathic pain

|  |  |  |
| --- | --- | --- |
| Characteristics | Patients with NP (n = 40) | Patients without NP (n = 40) |
| Gender (% of men) | 50.0 | 50.0 |
| Age (years, mean ± SD) | 58.5 ± 5.2 | 59.6 ± 5.0 |
| Education (%)  lower  medium  high | 15.0  65.0  20.0 | 12.5  65.0  22.5 |
| Occupation (%)  physical job  intellectual work | 40.0  60.0 | 40.0  60.0 |
| Employment status (%)  employed  unemployed | 62.5  37.5 | 65.0  35.0 |
| Marital status (%)  lives with a partner  lives alone | 87.5  12.5 | 85.0  15.0 |
| Age at onset of DSPN (years, mean ± SD) | 54.2 ± 7.8 | 52.8 ± 7.9 |
| Disease duration (years, mean ± SD) | 8.1 ± 2.4 | 7.8 ± 2.0 |
| Diabetes therapy (%)  oral  insulin  both | 60.0  27.5  12.5 | 62.5  22.5  15.0 |
| Type of polyneuropathy (%)  sensory  sensorimotor | 45.0  55.0 | 47.5  52.5 |
| Type of polyneuropathy (%)  axonal  axonal-demyelinating | 70.0  30.0 | 67.5  32.5 |
| NISS-LL total score (mean ± SD) \*\* | 12.2 ± 3.3 | 4.8 ± 1.6 |

\*p < 0.05; \*\*p < 0.01. SD - standard deviation; DPN - diabetic peripheral neuropathy; NP – neuropathic pain

**Table 2.** Sociodemographic and clinical characteristics of patients with chronic low back pain syndrome with and without neuropathic pain

|  |  |  |
| --- | --- | --- |
| Characteristics | Patients with NP (n = 40) | Patients without NP  (n = 40) |
| Gender (% of men) | 52.5 | 52.5 |
| Age (years, mean ± SD) | 51,2 ± 6.1 | 50.5 ± 5.8 |
| Education (%)  lower  medium  high | 15.0  67.5  17.5 | 17.5  70.0  12.5 |
| Occupation (%)  physical job  intellectual work | 42.5  57.5 | 42.5  57.5 |
| Employment status (%)  employed  unemployed | 75.0  25.0 | 72.5  27.5 |
| Marital status (%)  lives with a partner  lives alone | 87.5  12.5 | 85.0  15.0 |
| Age at CLBPS onset (years, mean ± SD) | 47.5 ± 7.2 | 47.4 ± 7.0 |
| Disease duration (years, mean ± SD) | 4.6 | 4.4 |
| CLBP (% of patients)  unilateral  bilateral | 65.0  35.0 | 67.5  32.5 |
| Root involve according to EMG (% of patients) **\***  none  L3  L4  L5  S1 | 0.0  10.0  22.5  35.0  32.5 | 20.0  5.0  5.0  35.0  35.0 |
| Severity of radiculopathy according to EMG (% of patients) \*\*  absent  mild  moderate  severe | 0.0  30.0  42.5  27.5 | 25.0  65.0  10.0  0.0 |
| Type of the lesion according to MRI (% of patients) **\***  disc herniation  degenerative changes | 100.0  35.0 | 15.0  90.0 |

\* p < 0.05; \*\* p < 0.01. SD – standard deviation; CLBPS – chronic low back pain syndrome; EMG – electromyography; MRI – magnetic resonance imaging; NP – neuropathic pain

**Table 3.** Frequency of different pain features in patients with diabetic peripheral neuropathy with and without neuropathic pain

|  |  |  |
| --- | --- | --- |
|  | Patients with NP (n = 40) | Patients without NP (n = 40) |
| **PD-Q** |  |  |
| Burning\*\* | 90.0 | 20.0 |
| Tingling or pricking\*\* | 97.5 | 85.0 |
| Light touching painful\*\* | 85.0 | 15.0 |
| Electric shocks\*\* | 62.5 | 12.5 |
| Cold or heat painful\*\* | 75.0 | 17.5 |
| Numbness\*\* | 97.5 | 72.5 |
| Slight pressure painful\*\* | 85.0 | 12.5 |
| **LANSS** |  |  |
| Pricking, tingling, pins and needles\*\* | 97.5 | 75.0 |
| Skin in the painful area looks different\*\* | 17.5 | 0 |
| Abnormally sensitive to touch\*\* | 85.0 | 15.0 |
| Electric shocks, jumping and bursting\*\* | 62.5 | 7.5 |
| Hot and burning\*\* | 95.0 | 35.0 |
| Allodynia\*\* | 85.0 | 12.5 |
| Altered pin-prick threshold\*\* | 87.5 | 37.5 |
| **DN4** |  |  |
| Burning\*\* | 95.0 | 25.0 |
| Painful cold\*\* | 75.0 | 20.5 |
| Electric shocks\*\* | 62.5 | 10.0 |
| Tingling\*\* | 97.5 | 72.5 |
| Pins and needles\*\* | 97.5 | 22.5 |
| Numbness\*\* | 90.0 | 50.0 |
| Itching\*\* | 37.5 | 2.5 |
| Hypoesthesia to touch\*\* | 97.5 | 50.0 |
| Hypoesthesia to pinprick\*\* | 87.5 | 12.5 |
| Allodynia\*\* | 85.0 | 12.5 |

NP – neuropathic pain; Pain Detect Questionnaire - PD-Q; Leeds Assessment of Neuropathic Symptoms and Signs – LANSS; Douleur Neuropathique 4 questions - DN4

**Table 4.** Frequency of different pain features in patients with chronic low back pain syndrome with and without neuropathic pain

|  |  |  |
| --- | --- | --- |
|  | Patients with NP (n = 40) | Patients without NP (n = 40) |
| **PD-Q** |  |  |
| Burning\*\* | 95.0 | 62.5 |
| Tingling or pricking\*\* | 85.0 | 70.0 |
| Light touching painful\*\* | 56.0 | 40.0 |
| Electric shocks\*\* | 90.0 | 12.5 |
| Cold or heat painful\*\* | 40.0 | 35.0 |
| Numbness\*\* | 77.5 | 62.5 |
| Slight pressure painful\*\* | 60.0 | 45.0 |
| **LANSS** |  |  |
| Pricking, tingling, pins and needles\*\* | 95.0 | 77.5 |
| Skin in the painful area looks different\*\* | 5.0 | 0 |
| Abnormally sensitive to touch\*\* | 72.5 | 25.0 |
| Electric shocks, jumping and bursting\*\* | 85.0 | 32.5 |
| Hot and burning\*\* | 97.5 | 37.5 |
| Allodynia\*\* | 85.0 | 25.0 |
| Altered pin-prick threshold\*\* | 90.0 | 15.0 |
| **DN4** |  |  |
| Burning\*\* | 90.0 | 12.5 |
| Painful cold\*\* | 35.0 | 12.5 |
| Electric shocks\*\* | 87.5 | 15.0 |
| Tingling\*\* | 90.0 | 80.0 |
| Pins and needles\*\* | 90.0 | 35.0 |
| Numbness\*\* | 92.5 | 52.5 |
| Itching\*\* | 15.0 | 2.5 |
| Hypoesthesia to touch\*\* | 92.5 | 7.5 |
| Hypoesthesia to pinprick\*\* | 92.5 | 15.0 |
| Allodynia\*\* | 85.0 | 25.0 |

NP – neuropathic pain; Pain Detect Questionnaire - PD-Q; Leeds Assessment of Neuropathic Symptoms and Signs – LANSS; Douleur Neuropathique 4 questions - DN4

**Table 5.** The sensitivity of the PD-Q, LANSS, and DN4 questionnaires in diagnosing NP in patients with DPN and CLBPS and clinical diagnosis of NP

|  |  |  |
| --- | --- | --- |
| Questionnaire | DPN | CLBPS |
| PD-Q | 0.76 | 0.74 |
| LANSS | 0.80 | 0.76 |
| DN4 | 0.91 | 0.90 |

Pain Detect Questionnaire - PD-Q; Leeds Assessment of Neuropathic Symptoms and Signs – LANSS; Douleur Neuropathique 4 questions - DN4; NP – neuropathic pain; DPN – diabetic peripheral neuropathy; CLBPS – chronic low back pain syndrome