

Abstract 040

Category: Clinical Practice

TITLE: Foot self-care for preservation of skin integrity according to the severity of diabetic peripheral neuropathy

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Introduction with problem statement

Patients with severe diabetic neuropathy often have hypoesthesia and numbness. This study evaluated foot self-care behavior according to the severity of diabetic neuropathy.

Methods

We used a hand-held nerve conduction test device, the DPN check (HDN-1000, Omron), to evaluate severity of diabetic neuropathy. Foot self-care was evaluated using the Japanese Summary of Diabetes Self-Care Activities Measure (SDSCA). Foot self-care comprised visual inspection, washing, wiping interdigital areas, and checking shoes, and was scored according to the number of days self-care was performed during the previous week. This study was approved by the Clinical Research Review Committee, Sapporo Medical University Hospital.

Results and discussion

The study evaluated 102 diabetic patients (mean age: 65.7 years, diabetes duration: 13.9 years, HbA1c: 7.3 %). Total scores (out of 28 points) for self-care behavior according to neuropathy severity were: 11.8 (Normal: n=54), 10.6 (Mild: n=27), 13.3 (Moderate: n=17), and 9.3 (Severe: n=4). Foot self-care scores were low in all groups, with particularly low scores in those with severe neuropathy. However, no statistically significant differences were observed. Foot self-care is essential in diabetes because lesions are more likely to occur in severe neuropathy. Living alone and the presence of recurrent foot lesions are associated with a poor survival prognosis. Accordingly, foot-care intervention must take neuropathy severity and lifestyle factors into account.

Impact on the discipline

The severity of diabetic neuropathy must be determined and foot-care intervention should take lifestyle factors into account.