論　文　要　旨

Median neuropathy at the wrist as an early manifestation of diabetic neuropathy

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Abstract

Aims/Introduction: To elucidate the clinical significance of median neuropathy at the wrist (MN) in patients with diabetes.

Materials and Methods: In total, 340 patients with diabetes who were hospitalized for glycemic control were enrolled in the present study. The diagnoses of MN and diabetic polyneuropathy (DPN) were based on electrophysiological criteria. A total of 187 patients were divided into four subgroups: patients without MN or DPN; patients with MN without DPN; patients with MN and DPN; and patients with DPN without MN. Intergroup comparisons of clinical characteristics and results of nerve conduction studies were carried out.

Results: A total of 71 patients had neither MN nor DPN; 25 had MN, but no DPN; 55 had MN and DPN; and 36 had DPN, but no MN. In comparison with the MN and DPN group, the MN without DPN group included more patients in the early phase of diabetes (diagnosed within the past 5 years) and fewer patients with diabetic microangiopathy. Comparative median nerve conduction studies showed significantly lower motor and sensory nerve conduction velocities, longer F-wave latencies, and smaller sensory nerve action potentials in patients with MN and DPN than in those without DPN.

Conclusions: MN in patients with diabetes could be attributed to an impairment in axonal function at common entrapment sites, and could be used to identify an early manifestation of diabetic neuropathy.