Stroke in the very elderly: Characteristics and outcome in patients over 90

M. Boada, A. Araiz, A. Menéndez, R. García, E. Flores

Keywords: Stroke; Elderly; Disability; Rehabilitation

Introduction. – The very old are expected to become a growing part of the stroke population in the developed countries, but related information is limited. Materials and methods. – Retrospective hospital-based population analysis of patients discharged from hospital with a principal diagnosis of acute stroke (ICD-10: 160–164) from 2003 to 2007. Patients over 90 were compared with the group of 85–89 regarding demographic data, stroke type, risk of disability, length of hospital stay and discharge destination. Results. – Among 898 patients (42.4%) were ≥90 (69% female), and 87 (9.6%) 85–89 (56.0% female). Ischemic stroke represented 83.3% and 77.0% respectively. Seven-day case fatality was 14.3% and 13.8%, and 30 day case fatality 26.2% and 26.4%. However severe disability (m-RankIn ≤5) was observed among the eldest group, from 7.1% pre-stroke to 35.7% after stroke, increasing by 28.6% vs. 13.8% (p < 0.01), 14.3% of nonagenarians and 27% of the younger attended rehabilitation. LOS > 30 days and discharge to long-term care facilities were more frequent among the eldest: 9.5% and 14.2% vs. 4.6% and 8.0%, whereas discharge to pre-stroke residence was less common; 59.5% vs. 63.2%. Discussion. – Stroke patients ≥90 showed higher disability at discharge, longer hospitalization, limited access to rehabilitation, and lower home return.

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Correlation and recovery of balance according to evoked potentials in hemiparetic stroke patients

S.Y. Lee, B.R. Kim, E.Y. Han, S.M. Kim, S.H. Im

Keywords: Stroke; Evoked potential; Balance

Introduction. – This study was undertaken to investigate correlation and recovery of balance ability according to motor evoked potentials (MEPs) and somatosensory evoked potentials (SSEPs) of lower extremity in sub-acute hemiparetic stroke patients. Materials and methods. – Thirty-seven hemiparetic stroke patients (average age, 66.7 ± 12.6 years) were enrolled for this study. All subjects performed motor evoked potentials (MEPs) of tibialis anterior muscle and somatosensory evoked potentials (SSEPs) of tibial nerve at baseline. Two groups were classified as response of evoked potentials (MEPs (+): presence of MEPs response, MEPs (-): absence of MEPs response, SSEPs (+): presence of SSEPs response, SSEPs (-): absence of SSEPs response]. Patients were evaluated for balance ability using the Bio rescue posturography. Among several parameters, we used weight distribution indices expressed by surface area (WDI-Sa) and pressure (WDI-Pr). Parameters were checked during eye open (EO) and eye closed (EC) state. Results. – In comparison of posturographic parameters according to EPs response, WDI-Sa (EO) (0.83 ± 0.14 vs. 0.97 ± 0.22, p = 0.04), WDI-Pr (EC) (0.81 ± 0.17 vs. 0.95 ± 0.21, p = 0.04), WDI-Pr (EO) (0.69 ± 0.25 vs. 0.90 ± 0.29, p = 0.03) and WDI-Pr (EC) (0.69 ± 0.25 vs. 0.98 ± 0.35, p = 0.01) scores were significantly lower in MEPs (+) group than MEPs (-) group. Discussion. – Our findings suggested that MEPS response was significantly correlated with balance ability at baseline in sub-acute hemiparetic stroke patients. http://dx.doi.org/10.1016/j.rehab.2014.03.086

Prognostic value of motor evoked potentials in the locked in syndrome

R. Davillè, L. Tili, C. Andriadistsanifantra, H. Baudoin, N. Kubis, A. Yelnik

Keywords: Locked in syndrome; Motor evoked potentials

Introduction. – Motor evoked potentials obtained (MEP) distally after stimulation of the motor cortex early after stroke, provides arguments for motor recovery. There is little information in the literature about MEP as a predictive factor in the Locked in Syndrome (LIS).

Case report. – The case of a patient with an incomplete LIS following a pontic infarct the 26 of May 2013 is reported. After 4 months of follow-up, the beginning of an active motor control of the elbow flexors on both side and in finger flexors in the only right hand was observed. MEP were obtained on both upper limbs.