ORAL PRESENTATION 2-1

뇌신경재활

발표일시 및 장소 : 10 월 18 일(금) 13:15-13:25 Room B(5F)

OP2-1-1

The prognostic value of motor-evoked potentials in general functional outcome after stroke

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Objective

Motor evoked potential was considered as one of good prognosis factor of motor recovery of stroke. The objective of this study was to investigate whether motor evoked potential (MEP) was related with motor recovery of upper and lower extremity and general functional outcome of patients with stroke.

Design

One hundred-ten patients with first-ever stroke of supra tentorial lesion were retrospectively enrolled for this study. General characteristics such as age, sex, stroke type, side of hemiplegia were collected for this study. Motor evoked potential and somatosensory potential study, Fugl Meyer motor assessment (FMA), modified Barthel index (MBI), Berg balance scale (BBS), O'connor finger dexterity test were evaluated in pre- and post-rehabilitation. Results of MEP were divided by 'evoked' and 'not-evoked' on upper and lower extremity, respectively.

Results

Acute stage of score of FMA of upper extremity and O'connor finger dexterity test were statistically significant greater in 'evoked' than 'not-evoked' in upper extremity MEP study. (FMA, 44.35+22.63 vs 18.00+20.12; O'connor finger dexterity, 2.41+5.37 vs 0.00+0.00) However, there was not significant differences in MBI in terms of upper extremity MEP study. Also, there was not significant differences in improvement of MBI between pre-rehabilitation and post-rehabilitation stage. Score FMA of lower extremity, BBS and MBI were statistically significant greater in 'evoked' than 'not evoked' in lower extremity MEP study (FMA 24.42+8.95 vs 12.38+9.98, BBS 16.52+16.72 5.43+8.56, MBI 40.88+23.53 27.65+19.02) However, there was not significant differences in difference between pre-rehabilitation and post-rehabilitation improvement of BBS and MBI in terms of MEP lower extremity.

Conclusions

The MEP was related with good status of pre-rehabilitation status of motor and general functional status. However, no significant better improvement of general functional status was observed in subacute stage of patients with stroke.