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INFLUENCE OF EARLY WALKING TRAINING TO STROKE HEMIPLEGIC PATIENTS' LOWER LIMB MOTOR FUNCTION

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Objectives Observing the influence of early walking training to stroke hemiplegic patients' lower limb motor function according to motor relearning programme.

Methods Selecting 58 stroke hemiplegic patients hospitalised in the Rehabilitation Medical Centre of Qinhuangdao First Hospital from March, 2010 to April, 2012, and randomly dividing them into two groups. Early walking training group has 29 patients, 16 male and 13 female, age from 47 to 68 and average age (54.2 ± 10.3), course of disease being (13.2 ± 10.3) days and 11 being left hemiplegic patients and 18 right hemiplegic patients. Regular rehabilitation treatment group has 29 patients, 15 male and 14 female, age from 45 to 65 and average age (54.9 ± 9.6), course of disease being (14.1 ± 11.8) days and 13 being left hemiplegic patients and 18 right hemiplegic patients. Sex and age differences of the two groups have no statistical significance. Regular rehabilitation treatment group: mainly applying nerve facilitation technique and motor relearning therapy based on Bobath's technique. Early walking training group: adding early functional walking training based on regular rehabilitation treatment. Once a day, 40 min each time and 4 weeks as one course for each group. Blind evaluation by certain people: selected patients are made following evaluations before treatment and 4 weeks after treatment respectively: (1) Fugl-Meyer Assessment Scale (Lower limb part); (2) Functional Ambulation Category (FAC); (3) Activities of Daily Life Barthel Index Scale. Applying SPSS 13.0 to analyse data, taking χ^2 to enumeration data, taking group t-test for comparison between two groups and paired t-test for comparison between before-treatment and after-treatment. $p < 0.05$ means the difference has no statistical significance.

Results The before-treatment differences of the paralytic lower limb motor function, walking function (FAC) and activities of daily life (Barthel index) of the two groups have no statistical significance. After 4 weeks' treatment, the paralytic Fugl-Meyer assessment scale score, FAC score and Barthel index score of the two groups have significant improvement ($p < 0.05$) and the improvement of early walking training group is more significant than that of regular rehabilitation treatment group ($p < 0.05$).

Conclusions Early developing functional waling training based on regular rehabilitation can effectively improve the walking function and daily life ability.