Neuropsychological and neurobehavioral deficits in brain injury rehabilitation

M Grünerova-Lippertova and M Tomanova
1Charles University, Czech Republic
2Brandýs Nad Orlicí Rehabilitation Clinic, Czech Republic

Statement of the Problem: For a successful social and occupational reintegration first of all the dimension of neuropsychological disturbances and behavioral disorders after brain damage is of major responsibility. Aim of the study was an analysis of behavioral disorders after stroke. Following questions should be answered: how many patients in sub-acute phase after stroke have deficits in behavior- which kind and degree-, are there any differences between the groups of patients with or without limitations in activities of daily living.

Orientation: Retrospective study, 61 patients 0-6 months after stroke were included. Examination of behavioral disorders was made with Neurobehavioral Rating Scale (NBRS), examination of daily behavior with Marburger Kompetenz Skala (MKS). Additional a second NBRS-scoring was made dividing up the patients in two groups: group 1 with patients with no or minor limitations in ADL vs. group 2 with patients with limitations in ADL. These two distributions were analyzed on significant differences with the non-parametrical U-test.

Findings: First of all, already in early phase of disease a huge spectrum of behavioral deficits can be recognized, mainly – next to well known symptoms of depression and fear - limitations in fatigability and attention. Results of the MKS-score of daily behavior showed most of all limits in recreational activities, physical work and mobility (driving a car, using the public transport) – this as well in self-assessment as well in foreign assessment. The hypothesis of a difference in NBRS, made by examination in the groups of patients with or without limitations in activities of daily living with the non-parametrical U-test, was affirmed by a score of p<0.001.

Conclusion & Significance: Behavioral deficits earn, especially in severely affected patients after stroke, special consideration. Early comprehension of individually neuropsychological and behavioral therapy could be expected as an important factor for improvement of reintegration of these patients.

Biography
M Grünerova-Lippertova has her research priorities in rehabilitation after stroke, neurotraumatology, early rehabilitation, experimental neuro-rehabilitation and psychotherapy. She was teaching at the University of Cologne: lectures and seminars in the field of rehabilitation. She is head of the Neurological Rehabilitation Centre ANR Bonn. She is also head of the Clinic of Rehabilitation Medicine in Prague and lecturer at the Charles University in Prague in the field of neuro-rehabilitation. Her innovative attitude helps finding new ways in neuro-rehabilitation care.

sekretariat@rehabilitaciustav.cz