

COGNITIVE DISORDERS ASSOCIATED WITH CHRONIC BACK PAIN

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Introduction: Chronic pain patients often report difficulties completing everyday tasks that require attention or memory. Despite the common complaint of cognitive difficulties in chronic pain patients, there has been very little objective evidence of a general deficit in attention and memory. The objective of the study was to detect cognitive disorders in patients with chronic back pain.

Subjects and methods: A total of 52 persons (28 patients and 24 controls) underwent ERPs and neuropsychological testing with Verbal Learning Test, test "Numerical square", Paced Auditory Serial Addition Test, and Trail Making Test A and B. Pain Intensity was measured with Visual Analogue Scale. Psychosocial disruption (Beck Anxiety Inventory, Beck Depression Inventory), and self-reported disability (Oswestry Disability Questionnaire) were also measured.

Results: There were no group differences in age, gender, educational level, test "Numerical square", Paced Auditory Serial Addition Test, and Trail Making Test A and B. Significant differences in Verbal Learning Test, latencies of the P300 waves, Beck Anxiety Inventory, Beck Depression Inventory were found. Prolonged P300 wave latency was significantly correlated with Verbal Learning Test. Neuropsychological scores were not correlated with pain intensity. Test Numerical square was significantly correlated with depression and Trail Making Test A and B were significantly correlated with anxiety. Patients with chronic back pain experience low quality of life, and neuropsychological scores were not correlated with self-reported disability.

Conclusions: Patients with chronic back pain demonstrated impaired neuropsychological performance, anxiety and depression as compared with the controls.