Psychosomatic Medicine and General Practice
Vol 3 No 4 (2018), e0304165
Conference Abstract

Photomagnetic therapy and craniosacral therapy for rehabilitation patients with chronic brain ischemia at subacute phase

Serhii Fedorov Shupyk National Medical Academy of Postgraduate Education

This is a conference abstract from the "Psychosomatic Medicine Of The XXI Century: Realities And Perspectives" Congress. It is dedicated to the photomagnetic therapy and craniosacral therapy for rehabilitation patients with chronic brain ischemia at subacute phase.

Introduction

Chronic brain ischemia (CBI) is among leading cerebrovascular pathologies. The development of an rehabilitation, including a combine use of physiotherapy (photomagnetic therapy, PMT) and manual therapy (craniosacral therapy, CST) for CBI patients is an promising task.

Purpose

The aim was to study the effectiveness of complex rehabilitation patients with CBI according to the results of paraclinical examinations methods in dynamics.

Method

We conducted clinical, neuropsychological and instrumental (Doppler ultrasound) assessment of 160 patients with CBI. The study groups included patients with CBI who received rehabilitation complex (PMT, CST, and/or their combination). In the control group only medical treatment was used.

Results

We revealed significant increase in blood flow velocity and improvement of venous outflow ($p < 0.001$) after complex rehabilitation according to Cranial Doppler and positive changes of resistance and pulsation indices *vs* control group which demonstrated only one-sided improvement of venous outflow.

The neuropsychological tests (Spielberger-Khanin anxiety scale, Beck Depression Inventory) significantly changed in the main group CBI patients: the situational anxiety indices decreased (47.7 ± 3.1 and 36.5 ± 4.2, $p < 0.01$ before and after rehabilitation respectively) and personal anxiety (up to 49.5 ± 4.1 and 37.1 ± 3.0, $p < 0.01$ before and after rehabilitation respectively), Beck Depression Inventory scores improved (mean rate was 18 ± 1.7 before and 9.0 ± 1.3, $p < 0.01$ after rehab). Multiple measurements of vegetative index Kerdo (VIK) indicated changes in the autonomic tone of patients after rehab sessions. We noted predominance of sympathetic effects of the autonomic nervous system ($VIK = 24.1 \pm 3.85$) prior to rehab sessions. During rehabilitation VIK scores significant decreased (to 10.7 ± 2.1) in the main group, indicating its shift to the normalization of the autonomic nervous system.

Conclusions

Thus, rehabilitation complex improves neuropsychological and Cranial Doppler parameters in patients with chronic brain ischemia at the subacute phase.