

Abstract:

Modern neurorehabilitation improves the quality of life for people with brain injury. An important role of modern physiotherapy is to apply all latest findings of brain neuroplasticity and to support and strengthen it.

The theoretical part of my work focuses on the physiology and pathophysiology of the central nervous system, the definitions of neuroplasticity, its mechanisms and the possible uses in rehabilitation, and it looks at different types of neurorehabilitation and its foundation. My work also reviews various substances that can influence neuroplasticity.

The practical part of my work describes a neurorehabilitation experimental model of laboratory rats and the resulting experimental outcomes.