## **Abstract**

Acute disseminated encephalomyelitis (ADEM) is a serious neurological disease with a variable progression, which can have permanent consequences for the patient, despite medical advances. An irreplaceable element of complex treatment is rehabilitation which has in recent years become a sophisticated preventative therapeutic method, mainly based on the study of plasticity and of the possibilities of brain regeneration. This work presents a comprehensive theoretical overview of our current knowledge of a relatively rare autoimmune disease of the central nervous system (CNS) as well as current options and procedures for affecting the course of the disease and its consequences through physiotherapy. It was written based on the collection of theoretical data, questioning and observation of the physiotherapy of a patient with ADEM, who was hospitalised for five months in various wards of 2nd Faculty of Medicine in Prague. Physiotherapeutic procedures are divided and applied in both the theoretical and practical parts of the work according to the phase model.

Theoretical knowledge, drawn from published case studies, as well as the course of the observed patient's disease and his following convalescence clearly illustrate that provided the timely commencement of intensive treatment and the continuation thereof during the recovery period, the prognosis for even a seriously affected CNS is milder and the functional effects are minimised. The complex treatment of the problematic of the clinical course, complications, and the treatment of ADEM can provide useful information to doctors, physiotherapists, and the students of these subjects. At the same time it may inspire the practical use of a range of physiotherapeutic methods at various stages of the illness with the goal of optimising the resulting state of the patient.