PAN – at is the proactive therapeutic approach using inflatable splints and other clinical tools, applied in neurorehabilitation. The approach uses repetitive training and goal-oriented activities to recover motor and sensory functions after damage of central nervous system. This bachelor's thesis dealt with the description of the approach on theoretical level and its practical applications. On this basis was created the manual of exercises with inflatable splints Urias, which will be available to patiens of Rehabilitation Medicine Clinic in Prag.
The theoretical part was developed on base of analyses of literature. There was set up a comprehensive text describing the history of the approach, its neurophysiological background, characteristics and possibilities of its utilization.
The practical part checked up effects of therapy. Research sample was consisted of five persons after traumatic brain injury or stroke. Therapies took place in average twice a week. The total period of practical application lasted for five weeks. To obtain the results of the therapy there were used goniometry, sensitivity investigation and modified Ashworth scale. Effects of the therapy was more described in two case studies.
This thesis confirmed effects of PAN – at characterized in available literature. There were noticed positive changes in the range of movements, sensitivity, muscle tone and in a grip quality.