

## **ABSTRACT**

This thesis deals with importance of rehabilitation at adult patients diagnosed with cerebral palsy (CP) and the effect of long-term physical therapy using neurostimulation system WalkAide.

Theoretical part of this thesis focuses on description of cerebral palsy with adult patients. It also discusses possible treatment and interventions. The WalkAide device is described at the end together with its effects.

The practical part measures 6 adult patients diagnosed with CP using 10meter walk test, single leg stand test and girth of calves' measures. Patients were also given a questionnaire asking about subjective effects of WalkAide and their therapy at Rehafit, o.p.s where the research took place.

Data are processed into graphical form and results of each patient are described in case reports.

Results show increase in walking speed, stability and calves' girth during long-term therapy using the WalkAide. Patients reported that effects of physical therapy are more persistent than effects of WalkAide itself and they reported the best subjective effect of therapy on their walking abilities.

**Key words:** WalkAide, Cerebral Palsy, Adults with Cerebral Palsy