

## Abstract

The aim of this work is to summarize the current knowledge about accelerometer in general than especially the possibilities of using this device in rehabilitation of hemiparetic patients. Give a look on pluses and minuses of using this technology in clinical practice.

This thesis is divided into two parts- theoretical and practical.

In the theoretical part I tried to explain some of the important key concepts, which knowledge is necessary for the comprehension of our issues and facilitate the use of the accelerometer, its inclusion into the rehabilitation plan of the patients in (KRL) and particularly hemiparetic ones.

In the practical part I focused on the actual monitoring using accelerometer, during some learned physical activities of choosed patients, and the evaluation of my own impressions of this instrument and the impressions of the monitorised patients themselves.

Keywords: hemiparesis, postural stability, WMS system, physical activity, monitoring.