Abstract:

This bachelor’s thesis is focused on comparing orthotic effect between an ankle foot orthosis and a functional peroneal electrostimulation on gait in patients after stroke. The goal of this thesis is to evaluate and compare orthotic effect of AFO and FPES. Footscan® and video analysis were both used for examining gait. This thesis consists of both theoretical and practical sections. The theoretical part contains basic knowledge on stroke and hemiparetic gait, focusing on foot-drop. It also contains a review of several studies describing the effect of AFO and FPES. In practical section of this thesis, two different patients will be used as case studies. These patients were measured without any aid, with AFO and then again with FPES. The variables evaluated are velocity of gait, length of stance phase, movement of center of plantar pressure and gait stereotype. Data from dynamic plantography is then evaluated and compared via tables, graphs and via photos.

Key words: stroke, foot-drop, functional electrostimulation, ankle foot orthosis, footscan