

Abstract

Spasticity is a manifestation of a central motoneuron disorder; the cause of the disorder may be trauma, ischemia, hemorrhage, inflammation or tumor. Even nowadays, it is difficult to define the pathophysiological mechanisms of spasticity, as well as to establish treatment. The aim of this study was to examine the immediate and long-term effect of rapid alternating movements training on stride length in the affected lower limb in spastic paresis. The theoretical part is devoted to a summary of the knowledge about central motoneuron syndrome, examination and its treatment. The practical part includes examination and evaluation of the effect of rapid alternating movements exercises using 3D kinematic analysis and a questionnaire.