

Abstract: Selective dorsal rhizotomy is a neurosurgical procedure for treating carefully selected patients with cerebral palsy. The aims of this thesis are to assess the influence of this treatment on changes in spasticity, functional abilities, locomotion and activities of daily living of these patients and also to assess the changes in these parameters in patients who were treated using this method at the neurosurgical department in University Hospital Motol in previous years. Six patients with CP diagnosis were tested - five 6 to 21 years old boys and one 35 years old woman. Ashworth and modified Ashworth scales were used to assess spasticity, goniometry was used to measure the range of passive movements. The Barthel index and Global care impairment scale by Dressler tested activities of daily living. Penn Spasm Frequency Score and Peacock's scale of locomotion were also used. The results showed a reduction in spasticity in lower as well as upper extremities, an increased range of passive movement of lower extremities, reduction of clonus the tendon of Achilles and an improvement of speech. Decreased pain and improved ability to perform activities of daily living were noted and hygienic care of a child was made easier thanks to this treatment.