

A neurosurgical method of the selective posterior rhizotomy (SPR) is used for a treatment of spasticity. The aim of this study is to evaluate an effect of the SPR on the reduction of the spasticity and on functional abilities of patients with cerebral palsy. Five patients (four males and a female) aged from 12 to 21 years with a spastic quadriplegia were tested by an Ashworth scale, modified Ashworth scale, Peacock scale and Barthel index of ADL. An initial assessment was performed one day before the SPR. First assessment of changes was conducted one week after the SPR. An repeated follow-up assessment was done three to four years after the SPR procedure. In one week after SPR assessment a reduction of spasticity of lower and upper limb muscles and reduction of clonus were seen. A last three-year assessment detected some return of spasticity on hip adductors, plantar and dorsal flexors muscles. However, the return of the hypertonus did not reach initial values of spasticity.