

The aim of this thesis “Use of mirror neurons in rehabilitation of upper extremities in patients after stroke” is to conduct basic information related to issues like stroke and use of mirror neurons in rehabilitation of upper extremities. In this review I would like to present data on mirror neurons, that appear to play a fundamental role in both action understanding, imitation and movement. I would like to stress, in particular, those properties specific to the human mirror neurons, that might explain the human capacity to learn by imitation.

This thesis consists of three parts. General part contains a general overview of stroke problematics, and its pathology, symptoms, course, diagnosis and therapy. The special part of this thesis explains the function of mirror neurons and their use in rehabilitation of upper extremities in patients after stroke. The thesis includes a case in which the examination and the therapy suggested by the author tries prove that mirror neurons can be part of the rehabilitation process.