

Summary

Title: Sports and physical activities in patient with quadriplegia as a complement of physiotherapy.

The aims of the work: The aim of the work was to show training effect on physiological capacity of man with quadriplegia by spirometry, ergometry and motoric tests and by the Spinal Cord Independent Measure (SCIM) and interview to sum up how the physical capacity changes influence the psychical condition and daily life activities managing.

The other aim was to make some guide for people with the similar difficulties and to show them how could improve their abilities with the help of sport.

Methods: The work has character of case study. We realized three examinations of ergometry, antropometric parameters, spirometry, motoric tests and observed the changes during one year. Patient filled up the SCIM at the beginning and in the end of monitored year and was interviewed because of himself subjective level rating in the end.

Results: After four months of training (the first examination) all measured physiological factors on ergometry got better. Spirometry was also quiet better. There was no evident changes in motoric tests. In the end of observing, after one year, majority of physiological factors was lower than after four months, but almost all of them achieved higher level than at the beginning. Occured declension of breath economy. The patient improved the performance in motoric tests. He achieved higher score in the Spinal Cord Independent Measure and because of that we can acknowledge the positive effect of better physical condition to improving power, skill, coordination etc. and consecutively activity of daily living. Patient evaluate the experience with sport positively as results from the interview.

Key words: quadriplegia, physical activities, sports of disabled persons, ergometry