

The aim of this thesis was to establish the criteria for the evaluation of disorders of postural stability in hemiparetic patients group using data obtained by using static posturography. We have created a group of 21 hemiparetic patients who were examined at the age of 40 - 55 years in the past, and the control group of 20 volunteers at the same age without any disorder of postural stability. Testing was carried out on the device Posturograph STP-03, which serves inter alia to assess the postural stability of individuals in quiet standing. First, subjects were examined in the standing on the broad base support and then in the standing on the narrow base of support (feet together). In each of these two cases, we performed measurements with eyes open and then eyes closed.

The values of all standing parameters, which had been measured for hemiparetic patients by using static posturography in the past, were compared to the results measured in the control group of volunteers. Using non-parametric Mann-Whitney test, we have demonstrated that the parameters Way, Area, LAT and the AP have statistically significant distinction between the two groups of people pursued. Through non-parametric Wilcoxon signed-rank test for two related samples, we have also confirmed the influence of difficult standing conditions to the resulting values of monitored standing parameters for both investigated groups of people. Finally, we set standards for selected standing parameters. Determination of criteria for the evaluation of disorders of postural stability wasn't possible on the basis of data available.