

Abstract

In this thesis, we have been dealing with the evaluation of progressing of the postural stability in the patients after the operation of the vestibular schwannoma (VS).

The stability was evaluated by means of stabilometric parameters (COP trajectory length, COP confidence ellipse area). We measured the development of the parameters before operation, immediately after resection and before the discharge. The set contained 17 patients ($n = 17$). The level of static importance we determined $p \leq 0,05$. We found a statistically significant difference between the measurement before the operation and the measurement immediately after the operation (COP confidence ellipse area: $p = 0,0183$, COP trajectory length: $p = 0,0355$). On the other hand, the change in both parameters in the measurement before the discharge and the testing after the resection wasn't statistically significant (COP confidence ellipse area: $p = 0,4081$, COP trajectory length: $p = 0,9991$).

Our next goal was to find out if the stability fault correlates with the disorder of function VOR. We testing the function of t-VOR by the subjective visual vertical (SVV) ($n = 24$), the function of the r-VOR by the dynamic visual acuity (DVA) ($n = 28$) and the caloric test ($n = 21$). We found a statistically significant correlation of both stabilometric parameters with Δ DVA ($p = 0,0328$, $p = 0,0213$). The correlation of SVV with the COP confidence ellipse area ($p = 0,0261$) and the correlation of the caloric test with the COP trajectory length ($p = 0,0153$) was also significant. On the other hand, there was not found a statistical significant correlation between the SVV and the COP trajectory length ($p = 0,0564$) and between the caloric test and the COP confidence ellipse area ($p = 0,0501$).