Abstract

The bachelor thesis evaluates comparison of selected functional and computer methods for testing stability. It is focused on finding a correlation between tests and comparisons in terms of time and space demands, equipment requirements, difficulty of performance and overall usability in practice for female floorball players.

The theoretical part describes the problematics of postural stability in floorball. In the first part there is a summary of professional terms related to the term of stability in physiotherapy. Furthermore, the specifics of floorball are described with a focus on the relation of injury and stability in this sport and there is also a summary of possibilities of testing static and dynamic stability, without the use of computer methods as well as with their use.

Methodology: A total of 40 players of the highest floorball (women's or junior's) competition took part in the research. For comparison, results from 31 probands were used. The average age of the involved players was 22 years (± 2.4). The participants underwent a total of three tests of stability, two of them were measured on a force plate (mCTSIB – Modified clinical test of sensory interaction on balance, US – Unilateral stance test) and one was a functional test (SEBT – Star excursion balance test).

Results: The work did not show a correlation between the standardized US test objectivized by force plate and the functional SEBT test which is used by athletes. The mean total time of the SEBT test (17: 18.27) was significantly longer than the time of other two tests (mCTSIB - 8: 40.29, US - 8: 43.55). In terms of finance and a space demands, the SEBT test was found to be the least demanding of the three tests examined.