Abstract

Title: Evaluation of postural stability of athletes - a literature review

Objectives: Thesis will address retrieval processing rating Dynamic Postural Stability of athletes . Compares analysis or results of research or investigations of different laborers working with this theme. It also mentions tests and machines used in clinical practice. It also investigates in what sports was postural stability tested and how or with what results. The most advanced, currently the most recognized dynamic posturography with impartial value is EquiTest device from NeuroCom. Therefore, the practical part focuses primarily on the results of examination of this device and make statistics about that.

Methods: The diploma thesis has descriptive and analytical character. It is elaborate as a literary review .

Results: The study includes 142 studies, of which only 11 concern the assessment of postural stability of athletes. Sports disciplines include tennis, football, baseball, tai-chi, taekwondo, gymnastics, basketball, softball. Entire EquiTest testing battery (which contains 7 test in total - Sensory Organization Test, Motor Coordination and Control Test, Adaptation Test, Unilateral Stance Test, Limits Of Stability Test, Rhytmics Weight Shift, Weight Bearing Squat) is almost never used in assessments although it´s a recommended procedure because of greater diagnostic sensitivity. Athletes are tested with EquiTest protocols which requiers controlled motor responses.

Key words: EquiTest; NeuroCom; SOT; MCT; ADT; LOS; RWS; WBS; US; Sensory Organization Test; Motor Control Test; Adaptation Test; Limits of Stability; Rhythmic Weight Shift; Weight Bearing Squat; Unilateral Stance; balance; COP; COG; CDP, postural stability, computer dynamic posturography, balance control, balance strategies, functional balance