

Title

Dynamics and kinematics of football goalkeeper's vertical jump

Aim of Assessment

The main problem is compares of explosive ability of football goalkeepers. The second task is evaluation of space movement kinematics for joints chosen on the human body. The last task is intraindividual stability of technique during several years' measurement.

Method

We observed group of 15 top level football goalkeepers. We measured 6 top level football goalkeepers in process of two years and one player during discontinuous three years. Force actions were measured by KISTLER platform and kinematics of body points were measured by 2D vide analysis by software TEMA Bio 2.3.

Results

Observing group could be called as homogenous group according to inverse dynamics parameters. During the evaluating years we can observe increasing of explosive ability of lower limbs by reason of training process and better technique of performance. Kinematics parameters are on very steady level. The mail differences were on vertical jump with help of upper limbs. The players could use different technique and could reach similar result of vertical jump.

Key Words

Vertical jump, , inverse dynamics, kinematics, Kistler platform, 2D analysis