

Task Kicking Performance with Biomechanical Instrumentation

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Abstract : The balance ability during task kick in soccer is a determining factor in the execution of functional movements that require a high-performance motor coordination. The current experiment explored it during an instep soccer kick and functional task kicking. Their kicking performance was measured in terms of the sway characteristics using lateral and antero-posterior balance of the center of pressure (COP) for the supporting leg and the kinematic data, the supporting leg's knee angle. The motion was realized with one-legged stance of five male indoor soccer players and using the trigger device ball controller. The results showed large balance in antero-posterior direction than in lateral direction. However, each player adopts a different way to kick the ball, and the media-lateral displacement of the COP showed no correlation with the balance skill.

Keywords : kicking performance, center of pressure, one-legged stance, balance ability

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