

Postural Balance Control and How a Player control a Balance during Dynamic Activity



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Abstract Balance and postural control is one of key factors in many sports and activities. The investigate balance. Several methods can be used to determine CoM, which kinematic model is the most common method. However, a full-bodied model is complex and required many markers. Thus, this can be time consuming due to marker tracking and analyzing. Selecting an appropriate biomechanical model to determine CoM can save amount of time. One of the advantage of kinematic model is that it can find CoM even when the feet leaves a ground as in during flight phase activities. A trajectory of (X)CoM during a motion then can be observed and explained how an athlete control their balance. In this presentation, biomechanical models to determine CoM during various sport activities will be discussed. Additionally, control of (X)CoM during complex task such as a tennis serve will be presented.

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