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خلاصه مقاله:

Ankle sprain is one of the most prevalent joint injury in the lower extremity. Valid and reliable measurement techniques is essential for the collection of accurate and meaningful data about joint injuries such as ankle sprain. We design this case-control study to evaluate the test–retest reliability of force plate measures and compare the static postural control values in in patients with chronic ankle Instability (CAI), ankle sprain copers & healthy controls. Seventy five patients (۲۵ CAI, ۲۵ copers & ۲۵ healthy match controls) were asked to execute single-leg stance onto a force plate. Force plate parameters include, the COP area, COP length, mean total velocity and sway index were measured for static postural control evaluation. To evaluate test–retest reliability, ۲۰ participants of each group repeated the tests ۶–۸ days after the first session. Relative reliability of the force plate measures was assessed using interclass correlation coefficient (ICC) and absolute reliability using standard error of measurement (SEM), minimal metrically detectable change (MMDC) and coefficient of variance percent (CV%). Analysis of variance (ANOVA) was used to determine differences between three groups. Static postural control measures have high test–retest reliability, ranging from ۰.۷۳ to ۰.۸۸. Greater postural sway has been observed in the CAI compared with the coper (P< ۰.۰۵) and the matched limb of the control group (P<۰.۰۵). Static postural control measures are reliable tests to evaluate functional performance of the patients with CAI, copers and healthy controls.

کلمات کلیدی:

Postural balance, center of pressure, Ankle sprain, balance, postural stability