

## 2<sup>nd</sup> International Conference and Exhibition on Physical Medicine & Rehabilitation July 14-16, 2014 DoubleTree by Hilton Baltimore-BWI Airport, USA

## A preliminary reliability study of a qualitative scoring system of limb alignment during single leg squat Adel Almangoush

Adel Almangoush University of Salford, UK

**Background:** To assess the inter- and intra-observer reliability of a qualitative scale of the limb alignment during the single- leg squat (SLS) test.

**Methods:** Repeated measures by using a qualitative score from the video assessment of the SLS test for (two female and two male) by four independent assessors on two separate occasions at university human performance laboratory.

**Results:** The percent agreement (PA) for the four observers across all scoring criteria for all subjects was excellent (ranged 83-100%). All observers were in 100% agreement in 5 out of 10 of all of the scoring criteria of all subjects. The kappa measure of agreement ranged from k =0.63 to 1.0 which is good/substantial to almost perfect/excellent. The intra- observers PA ranged 95% - 100%, with kappa values of k = 0.89 - 1.0.

**Conclusion:** The study showed very good to excellent inter- and intra-observer reliability for all examiners when comparing their individual scores of the SLS test across two analysis sessions using the assessment tool. The findings indicate that this qualitative evaluation method may allow clinicians and researchers to standardise the categorization of functional movements of single-leg loading such as the SLS regardless of the equipment, time and venue.

salford2013@gmail.com