Knee laxity evaluation: Rotation measurement - How do you score your patient?

Quantitative evaluation of the Pivot-shift using an electromagnetic measurement system

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An accurate and dynamic functional evaluation is necessary not only for the primary ACL injury, but also for outcome evaluation in ACL reconstruction. The pivot-shift test is commonly used for assessing dynamic rotatory knee laxity in ACL-insufficient knees and is related to subjective knee function. Residual pivot-shift after ACL reconstruction is a crucial factor related to poor clinical outcome. Not only 3-dimensional position displacement but also its acceleration during pivot-shift phenomenon should be measured for quantitative evaluation of the pivot-shift test and is currently feasible by using electromagnetic measurement system. We summarize the basic knowledge and current clinical application of quantitative exploration of the dynamic knee movement during the pivot-shift test.

References


