Abstract

Background: The Lower Quarter Y-Balance Test (YBT-LQ) is used by sports medicine professionals to measure an athlete's dynamic balance. The YBT-LQ is used by clinicians to track recovery during clinical rehabilitation, assess an athlete's readiness to return to sport after injury, and to identify athletes potentially at-risk for a time-loss injury. Normative data for the YBT-LQ are lacking for female collegiate volleyball (VB) players. The purpose of this study was to examine preseason YBT-LQ scores and their relationships to level of competition, starter status, player position, and prior lower quadrant (i.e., low back and lower extremities) injury history.

Methods: One-hundred thirty-four female collegiate VB players (mean age = 19.3 ± 1.1 years) representing athletes from three levels of competition (D II = 32, D III = 77, NAIA = 25) participated in this study. Athletes reported their prior injury history and performed the YBT-LQ testing protocol.

Results: NAIA and D III athletes demonstrated significantly greater reach measures on the YBT-LQ than D II athletes in several directions. Starters demonstrated significantly greater reach measures in five out of eight reach directions. Liberos/defensive specialists/setters demonstrated significantly greater posterolateral and composite reach measures bilaterally. There was no difference in reach measures based on prior history of lower quadrant (low back and lower extremities) injury.

Conclusion: This study provides normative data for YBT-LQ in female collegiate volleyball players. The data presented in this report may be used by coaches and rehabilitation professionals when evaluating dynamic balance in healthy volleyball players and by clinicians to compare an injured athlete's recovery to norms.

Level of Evidence: 3b

Keywords: balance, college, functional test, Movement System, volleyball, Y-Balance Test-Lower Quarter

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