A New Functional Test Promoted to Measure Core Strength

An injury to the competitive athlete may significantly impact their physical and mental well-being, disrupt their life with medical appointments, and affect their team’s success. Administering a test, or a series of tests, during the off-season or preseason that identifies functional weakness may help the strength training professional intervene with an injury prevention training program.

The “Bunkie” Test

There is a growing awareness that a dysfunctional core may contribute to the onset of injury or limit one’s functional performance during competition. Many tests, such as the squat, the lunge, the lateral endurance test, and back extensor test have been used to assess core function (1). When assessing core function in high level athletes, de Witt suggests a new test should be administered—the “Bunkie” test (2).

The “Bunkie” test consists of five testing positions. It has been suggested that these tests will assess the function of all the core muscles along various fascia lines (2). The tests require minimal equipment: an adjustable bench and a mat. As can be seen in each figure, the bench is required to rest the legs and the mat is placed to cushion the upper extremities. The bench should be adjustable allowing a height of approximately 25 to 30 cm in height (2). de Witt recommends for smaller individuals, a lower height may be necessary so that the extremities can support the body in a straight line.

The five testing positions are the posterior power line (figure 1), the anterior power line (figure 2), the posterior stabilizing line (figure 3), the lateral stabilizing line (figure 4), and the medial stabilizing line (figure 5).

In each testing position, both feet are initially supported on the bench with the upper extremities (palms and forearms) supporting the upper body. Once positioned, the athlete will raise one leg/foot a few inches off of the table/bench. It is suggested that athletes should be able to hold this position between 20 to 40 seconds (1). Athletes who are unable to hold a test position for the desired period of time should then be prescribed corrective exercises. For example, and individual who is unable to perform the lateral stabilizing line for 40 seconds should be prescribed the side plank and side plank with hip abduction exercises. The tests should also be performed bilaterally. This will help one identify asymmetrical strength differences.
Conclusion
There is paucity in the literature regarding the efficacy of administering a functional test for the purpose of identifying at risk athletes. The “Bunkie” test is a novel and challenging approach to athletic functional testing. Further testing is necessary by researchers in order to demonstrate its overall reliability and validity.

Reference