

Kettlebell Turkish Get-Up: Training Tool for Injury Prevention and Performance Enhancement

Adam Ayash, MS, CSCS and Margaret T. Jones, PhD, CSCS*D • George Mason University

The kettlebell is a popular device for exercises designed to enhance athletic performance, and for injury rehabilitation.^{1,2} The girya, Russian for “kettlebell,” is a cast iron weight that resembles a cannonball with a handle.^{3,4} Kettlebells range in weight from a few pounds to over 100 pounds. Weight selection is dependent upon the nature of the exercise, or the user’s level of experience and strength (Table 1). The kettlebell

first appeared in the Russian dictionary in 1704.^{3,4} Originally used as a counterweight for market produce scales, it became a popular training tool among Russian strongmen and weightlifters, known as gireviks or kettlebell men, in the early 20th century.^{3,5} The unique

shape and off-set center of gravity permit the use of curvilinear movement patterns and the development of centrifugal force.^{5,6,7,8} The kettlebell’s shape places the weight in a hanging position, which keeps the force of the weight directed downwardly, helping to maintain a vertical body position throughout performance of the exercise.⁹

A popular kettlebell exercise is the Turkish Get-Up (TGU), which can be defined as a

multistep, progression-based total body exercise that is performed by “getting up” from a supine position to a standing position.^{8,9} The origins of the TGU can be traced over 200 years to Turkish wrestling training.^{6,9} Before allowing a wrestler to proceed to the next stage of training, he was required to get up from the ground nimbly, while holding a kettlebell overhead and maintaining control.⁹ Today, the TGU is included in training programs because of its versatility, the challenge it presents to maintenance of stability, and the demand that it imposes for development of strength throughout the entire body. The TGU can serve as a corrective exercise, a movement screen, or a conditioning workout.⁹ Given the step-wise nature of the movement, it can also be used to elicit adaptations in untrained and injured individuals or to challenge well-trained individuals who require a high-intensity stimulus (Table 2).

KEY POINTS

The kettlebell has become a popular training tool for injury prevention and performance enhancement.

The “Turkish Get-Up” is a challenging total-body exercise that can be used as a movement screen, corrective exercise, and conditioning method.

TABLE 1. SUGGESTED KETTLEBELL LOADS FOR TGU

Experience	Kettlebell Load (Male)	Kettlebell Load (Female)
Beginner	8-12 kg	4-6 kg
Intermediate	12-16 kg	6-8 kg
Advanced	≥ 16-24 kg	≥ 8-12 kg

Injury Prevention and Performance Enhancement

Functional exercises are often incorporated in training regimens to prevent injury and enhance performance.¹⁰ The TGU has application in developing hip and shoulder stability, flexibility, and strength in the core, hip, and knee musculature.^{2,5,6,8,9,11} Core stability is believed to be critical for injury prevention and the transfer of power throughout the kinetic chain during movement.^{12,13} During the TGU, the core is challenged to resist spinal rotation, flexion/extension, and side bending (Figures 1– 8). Holding a kettlebell overhead creates an asymmetrical load that places a rotary demand on

the core musculature to stabilize the torso. Suggested loads for TGU are presented in Table 1.

Movement Screen

The TGU has application as a movement screen for gluteal function.⁹ The primary gluteal muscle is the gluteus maximus, which is responsible for generating power for hip extension.² Proper technique for most athletic movements requires generation of power for hip extension.¹² Limited gluteal activation is thought to result from inadequate hip mobility caused by hypertonic antagonist muscles, which may lead to utilization of compensatory movement patterns.^{2,12} For example, lumbar extension may compensate for

TABLE 2. SAMPLE TGU WORKOUT PROGRESSIONS

Experience	Exercise	Volume*	Rest
Beginner*	1. Iso (lateral) Get-Up Steps 1-7 individually	3-5 reps of each step alternate (R/L)	30-45s between steps
	2. Half Get-Up Steps 1-3 then reverse	3-5 reps alternate (R/L)	30-45s between reps
	3. Full Get-Up	3 reps alternate (R/L)	30-45s between reps
Intermediate	1. Get-Up to High Bridge Steps 1-4 then reverse	3-5 reps alternate (R/L)	30-45s after every other rep
	2. Repeat Get-Up	3-5 reps of each step consecutively (R/L)	1-3min between (R/L)
Advanced	1. Full Get-Up	5 reps alternate (R/L) or consecutively	None
	2. Circuit + Full Get-Up	1-3 reps as part of circuit routine (R/L)	Varies based on sport or training goal

Select one of the sample workouts based on experience level.

*All beginner workouts should first be completed using only bodyweight. Upon the successful completion of Beginner Workout 3, athletes can attempt TGU with a kettlebell and progress load accordingly.

* Complete two sets for a given TGU progression (1R/1L). Actual number of reps will vary based on the steps included in the progression.



Figure 1 Pre-roll: Assume a side lying position prior to initiating the roll to press movement. Grip the kettlebell with the right hand over the left.



Figure 2 Supine Press: Pack the shoulders and brace the core. This is necessary for proper body alignment throughout the Turkish Get-Up.



Figure 3 Press to Elbow: Incorporate an upward diagonal rolling motion while driving the kettlebell vertically to get up onto the opposite elbow.



Figure 4 Elbow to Hand: A continuation of the rolling motion during the Press to Elbow movement. Extend and place the ground-supporting arm almost directly under the shoulder in order to enhance the base of support and reduce strain on the glenohumeral joint.



Figure 5 High Bridge: Extend the hips to full extension while stabilizing the kettlebell overhead.



Figure 6 Leg Sweep to Knee: A challenging step requiring shoulder/hip mobility and stability that also tests spatial awareness. Sweep the leg under the body from High Bridge. Plant the knee in line with the ground-supporting hand while maintaining focus on the kettlebell.

a lack of hip extension, which may impose stress on the lumbar spine, or the hamstrings may assume a role as the primary hip extensors, thereby increasing risk for muscle strains.

The TGU high bridge (Figure 5) can be used to assess gluteal strength, because the gluteal muscles must be activated to raise the pelvis into full hip extension while the core stabilizes the torso. Inability to reach

this position may indicate decreased hip extension and compensatory lumbar extension. Excessive lumbar extension may be an indicator of core instability. The TGU high bridge, the knee to half-kneeling (Figure 7), and half-kneeling to stand (Figure 8) exercises can be used as movement screens to provide an indication of gluteal performance inadequacy that should be addressed when designing an exercise program.

Corrective Exercise

The TGU can also be used to improve glenohumeral joint stability. Control of the shoulder is largely dependent on the rotator cuff musculature and scapular stabilizers.^{1,14,15} During movement, the muscles of the rotator cuff stabilize the humeral head within the glenoid fossa.^{1,15} The scapula provides a base from which the rotator cuff muscles can provide dynamic stabilization of the glenohumeral joint.^{14,15} Inadequate scapular stabilizers and over-active anterior mobilizers may place the scapula in a suboptimal position that restricts glenohumeral range of motion, particularly external rotation of the humerus.¹⁵ Dysfunctional movement patterns, coupled with the stress of repetitive and explosive overhead movements (e.g., pitching a baseball or serving a volleyball), may increase risk

for injury to glenohumeral ligaments, tendons, and muscles.^{1,15}

The TGU strengthens muscles that stabilize the scapula in an optimal position. The trapezius, rhomboids, and serratus anterior must be simultaneously activated to pull the scapula into a position of depression and downward rotation. The base of support for the body mass will be suboptimal when the ground-supported shoulder is in a suboptimal position (i.e., protracted scapula, elbow out of line with shoulder), and the resulting movement pattern will force the upper arm to work harder to stabilize the kettlebell. Hip flexion and thoracic spine extension initiate the movement of the upper body from the ground as the kettlebell is pushed upwardly in a vertical direction (Figure 2).⁶ The act of gripping (or “crushing”) the kettlebell for control should recruit muscles of the arm, chest, and shoulder to stabilize the humerus.⁶ The TGU can enhance shoulder stability by improving scapular stability, thoracic extension, and rotator cuff strength.^{6,9}



Figure 7 Knee to Half-kneeling: Shift the hips while maintaining a stiff core in order to move the torso into vertical alignment.



Figure 8 Half-kneeling to Stand: An advanced lunge variation that requires asymmetric overhead stabilization of the kettlebell. Reversing the Turkish Get-Up will begin with a reverse lunge down to the half-kneeling position.

Performing the Turkish Get-Up

Step 1. Roll to Press: Lie down on the left side with knees flexed at $\sim 90^\circ$ and the upper arms against the torso. Grasp the kettlebell with the right hand placed over the left, and with the elbows flexed at $\sim 90^\circ$ (Figure 1). Roll onto the back and keep the bell close to the body. Extend the right leg with the foot in dorsiflexion. Place the right arm palm down at 45° in relation to the trunk. Bend the left knee to 90° and plant the foot. Press the bell overhead with the left arm (Figure 2).

Step 2. Press to Elbow Support (Figure 3): Prior to sitting up from the supine press position, retract the shoulders to establish and maintain proper scapular position on the thoracic spine, brace the core, and look at the kettlebell. Roll diagonally and upward onto the right elbow while driving the kettlebell straight up with the left arm. There should be a straight alignment between the right elbow and the left hand. The core must resist lateral flexion, in a manner similar to proper performance of a side-plank exercise.

Step 3. Elbow Support to Hand Support (Figure 4): Continue to drive the kettlebell upward. Extend the right arm and push up onto the right hand. The left arm remains in a vertical position with the elbow extended and the wrist maintained in a neutral position during the transition. Plant the right hand directly under the right shoulder, with the fingers pointing outward and the right elbow extended.

Step 4. High Bridge (Figure 5): From the hand-supported position, thrust the hips upward without hyperextending the lumbar spine (driving with the right hand and left heel). At the top of the high bridge there should be a vertical alignment between the left hand and the right hand. The left leg should not be rotated inwardly.

Step 5. Leg Sweep to Knee Support (Figure 6): From the high bridge position, sweep the right leg under the body and kneel on the right knee in a position close to the weight-supporting right hand. Be sure that the left knee does not rotate inwardly. Maintain the vertical alignment between the left and right hands. Keep the eyes on the kettlebell during the leg sweep.

Step 6. Knee Support to Half-Kneeling (Figure 7): Drive the right hand upwardly and bring the torso into a vertical orientation. Rotate the lower leg of the right extremity 45° counter-clockwise to assume a lunge position. Align the left arm with the left ear while maintaining retracted shoulders and a forward-facing head orientation. Contract the right gluteal muscles to create a stable base of support, and make sure the right foot is dorsiflexed with the toes tucked.

Step 7. Half-Kneeling to Standing (Figure 8): Push from the toes of the right foot and the left heel. Keep the eyes directed straight ahead and stand up. Finish in a standing position with the gluteal muscles contracted, shoulders retracted, and the left arm extended overhead in alignment with the left ear.

Step 8. Reversing the TGU: Standing to Half-Kneeling. Execute a reverse lunge, stepping in a backward direction with the right leg. Place the right hand on the ground as the lower right leg is rotated 45° in a clockwise direction (Figure 6). Sweep the right leg back, bypass the High Bridge position, and proceed directly to the hand supported position (Figure 4). Continue reversing to the elbow supported position (Figure 3) and finish the descent, slowly rolling back (think one vertebrae at a time) into the supine press position (Figure 2). To complete the exercise, lower the kettlebell to the ground.^{8,9} The left arm should remain extended in a vertical position throughout the descent from the standing position.

Conditioning Method

The TGU can also be used as a sport-specific training tool.⁹ The movement progression includes elements of traditional exercises, such as the side plank (Figure 1), bridge (Figure 5), and lunge (Figure 6), with the

addition of an overhead load.¹⁶ By utilizing slow and controlled total-body movement, a large amount of muscle mass is recruited. Kettlebell workouts have been shown to increase metabolic demand.⁷ An athlete, such as a wrestler, may benefit from performing multiple repetitions that alternate from one side to the

other. The TGU can incorporate sport-specific movement patterns, such as rolling over, reaching, lunging, and getting up from the ground.^{6,9}

Practical Applications

Space availability, time, and client performance capabilities must be considered when designing an exercise program. The TGU requires limited space and equipment, but it is a complex exercise that requires instruction and practice for mastery. Practicing each TGU step prior to kettlebell loading is recommended. The High Bridge (Figure 5) and Leg Sweep to Knee Support (Figure 6) are difficult steps that require practice. A useful coaching technique is to practice the TGU while balancing a shoe on top of the fist (Figure 9). Muscle tension must be maintained throughout the body in order to balance the shoe, thereby developing a foundation for control of the overhead load imposed by the kettlebell. Following performance of three perfect “shoe” repetitions on each side of the body, a load can be added (Table 1). Table 2 presents sample training routines. After proficiency is demonstrated for three repetitions on each side at a given load level, the intensity or volume of the exercise can be increased. Athletic trainers and therapists should exercise caution when progressing the exercise to heavier loads.



Figure 9 Shoe Balance: Maintaining a shoe on top of the fist is a useful technique for teaching beginners to keep the arm vertical and to maintain tension throughout the Turkish Get-Up.

Summary

The TGU offers a challenging exercise that may decrease injury susceptibility. The TGU exercise should

be performed in a slow and controlled manner, holding each position for 2–3 seconds, which will increase body awareness and permit correction of improper body positioning. Maintaining spine alignment while maneuvering the kettlebell to an overhead position makes the TGU an ideal exercise for enhancement of sport skills that require core stability and transfer of force from the core to the extremities.⁴ ■

References

1. Brumitt J, Meria E. Scapula stabilization rehab exercise prescription. *Strength Cond J.* 2006; 28:62–65.
2. McGill SM, Marshall LW. Kettlebell swing, snatch, and bottoms-up carry: back and hip muscle activation, motion, and low back loads. *J Strength Con Res.* 2012; 26(1):16–27.
3. Pabian PS, Kolber MJ, and McCarthym JP. Postrehabilitation strength and conditioning of the shoulder: an interdisciplinary approach. *Strength Cond J.* 2011; 33:42–55.
4. Tsatsouline P. *Enter the Kettlebell!* St. Paul, MN: Dragon Door Publications, Inc.; 2006.
5. Fable S. Kettlebell comeback. *IDEA Fitness J.* 2010; 7:25–27.
6. Cheng LA, Jones B, Cook G. Kettlebells from the Ground up: the Kalos Sthenos. Chatham, VA: Gray Cook and Functional Movement Systems; 2008.
7. Farrar RE, Mayhew JL, Koch AJ. Oxygen cost of kettlebell swings. *J Strength Con Res.* 2010; 24:1034–1036.
8. Lurie S. *Kettlebells for Dummies!* Hoboken, NJ: Wiley Publishing, Inc.; 2010.
9. Cheng LA. The Turkish get-up progression. In: *Russian Kettlebell Challenge Instructor Manual.* Tsatsouline P, ed. St. Paul, MN: Dragon Door Publications, Inc.; 2009.
10. Jones MT, Trowbridge CA. Four ways to a safe and effective strength training program. *Athl Ther Today.* 1998; 3:4-9.
11. Liebenson C, Shaughness G. The turkish get-up. *J Bodywork Mov Ther.* 2011; 15:125–127.
12. McGill SM. Core training: evidence translating to better performance and injury prevention. *Strength Cond J.* 2010; 32:33-46.
13. McGill SM. *Ultimate Back Fitness and Performance* (4th ed). Waterloo, Canada: Backfitpro Inc.; 2009.
14. Morgan WE. Core stiffness and cross fitness: without the stiffness there is no fitness. *Dynamic Chiropractic.* 2009; 27:6.
15. Oatis CA. *Kinesiology the Mechanics and Pathomechanics of Human Movement.* Philadelphia, PA: Lippincott Williams and Wilkins; 2004.
16. Kibler BW, Press J, Sciascia A. The role of core stability in athletic function. *Sports Med.* 2006; 36:189–198.

Adam Ayash is an adjunct instructor at George Mason University in Manassas, VA. He also works as a strength and conditioning coach in the sports performance field.

Margaret Jones is an associate professor with the Sports Medicine Assessment, Research and Testing Laboratory at George Mason University in Manassas, VA. Research interests lie with strength and power development for athletic performance.