Contents lists available at ScienceDirect

# Journal of Bodywork & Movement Therapies

journal homepage: www.elsevier.com/jbmt



### PREVENTION & REHABILITATION: PATIENT SECTION

## The Kettlebell Arm Bar

### Lance Coffel<sup>\*</sup>, D.C. Craig Liebenson

2911 SW Turner Rd., West Linn, OR 97068, United States



#### 1. Introduction

SEVIE

The Kettlebell Arm Bar (KAB) is an effective stability and/or mobility exercise for the shoulder girdle. It also increases thoracic spine mobility while providing a stretch for the latissmus dorsi and pectorals on the free arm (non-kettlebell) arm. The KAB is a functional exercise which has great potential to transfer to skills such as Overhead Press (Military Press), Get-Up, Reaching, and Throwing. This exercise is not intended to be used with heavy weights (if resistance is too heavy the prime movers may take over, not allowing stabilizers to do their job). In particular, the shoulder might become shrugged, thus causing compensations which would mitigate against the effectiveness of investing in the KAB.

#### 2. The exercise

#### 2.1. Phase 1 - (right side example)

- Start with minimal weight (or alternatives such as a, water bottle, or thera-band flexbar)
- Begin in the fetal position with shoulders packed down (avoiding any shoulder shrug towards the ears (Fig. 1))
- Safely get to supine position with knees bent and feet on ground (Fig. 2)
- Then press the right (loaded) arm towards the ceiling, while keeping both shoulders packed (Fig. 3).
- Now straighten the left leg (extend) and arm (overhead/flexion) (Fig. 4a 4b)
- While keeping the right arm reaching towards the ceiling right arm straight and vertical, palm facing the direction of the turn, rotate the rest of the body to the left (Fig. 5a 5b)
- The right leg remains bent and contacts the floor with the right heel approximately at the level of the left patella
- The left ear and head rest on the left bicep, but the attention (i.e. eyes) should be on the kettlebell (KB)!

- NOTE: It is very important for the head/neck to feel relaxed on the bottom arm
- A straight line should be maintained from fingertips of bottom arm to bottom leg, foot avoiding hyperextension of the spine
- Proprioceptive vertical should be maintained, and the KB should not be allowed to pull the arm into an unsafe hyperextended position (there should be no attempt to stretch the anterior deltoid)
- Note: It is important to ensure that the KB can be held up for a specified time (possibly a longer set of 30 s to 1 min, or a few shorter sets 15–30 s) without breathing heavily, or the weight oscillating back and forth out of control.
- Once the weight is able to be held in a stable anatomical neutral, it may be useful to experiment with external rotation of the right arm
- NOTE: After confidence is gained it is in order to stop looking at the KB and to relax the head/neck so that proprioceptive vertical can be experienced without looking.

#### 3. Phase 2

- \* This phase should be performed only after practice and competency in phase 1.
- Straighten the right leg on the floor, with feet shoulder width apart (Fig. 6).
- Pulse the right hip towards the floor (1-2 s) contracting the right gluteus maximus. This hip extension will also bring the right pectoralis (chest) muscle towards the floor, thus moving it away from the vertical/stationary KB and allowing for a positive effect on the anterior chain of the shoulder and thoracic spine.
- Continue to increase left shoulder flexion (as prudent).

\* Corresponding author. *E-mail address:* lancecoffel@gmail.com (L. Coffel).

http://dx.doi.org/10.1016/j.jbmt.2017.05.023 1360-8592/© 2017 Published by Elsevier Ltd.



Fig. 1. Fetal position.



Fig. 2. Supine position.



Fig. 3. Press.

- Very flexible people may place their heads on the floor.
- After a few hip pulses try to relax to let stabilizers do their job.
  Hold the Arm Bar as long as there is safe progress in letting the
- shoulder/body learn, but not so long that fatigue sets in.
- Reverse the steps to the starting position, and repeat on other side (being careful to control the KB).

#### 3.1. Tips

- Maintain the shoulder packed position (Scapula retracted and depressed)
- Avoid slumping with a clear focus on maintaining upright posture through thoracic extension
- Mobilize the chest muscles possibly with a wall stretch
- Pneumomuscular reflex activation meaning forceful exhalation making a tss .... tss sound
- Separately train core activation so that the ribs won't flare upwards due to over-arching of the low back. The goal is to transfer this skill to the KAB so that the entire pillar can roll like a barrel

#### 3.2. Typical signs of dysfunction or compensation

- The main signs of poor form include
- twisting the trunk instead of rolling so that the ribs wind up, flaring upwards
- shrugging the shoulders (i.e. losing the packed position)
- hyperextending the lower back

#### 4. Summary

The KAB is a powerful assistance move for training when the goal is shoulder girdle stability. It should not be viewed as a strength training exercise, but it can allow other exercises to be







Fig. 6. Straighten top leg into floor.

used for building strength in a sustainable way. The ultimate goal is participation in activities important in life such as tennis, golf, carrying children, lifting boxes, throwing things, reaching, etc ... Building strength safely is a cornerstone of performance enhancement so that the body continues functioning well through the rigors of competitive activities, weekend warrior hobbies, or simply to maintain basic functions throughout the lifespan.