

## **Disclaimer**

The author is not currently practicing in the health/fitness field. The "client" is a friend of the author's. The author poses the hypothetical situation: "Within my scope of practice, this is how I would best address the client's issues and the objectives of this assignment".

Additionally preceding the following "reload" stability discussion, the author assumes: no clinical presentation of "pain"; and the reset-reinforce portions have been successfully conducted, and any mobility issues have been resolved.

## **Client Description**

Mr. JS is a 47 year old fit, regularly (goes to gym to lift weights) active gentleman working in a company that develops afterschool enrichment programs/activities for kids from grade school through high school. Mr. JS's duties are split between administrative/office work and working directly with kids in a classroom setting. Mr. JS and his family enjoy activities such as indoor climbing, hiking, canoeing, biking, and basketball. Mr. JS has not had any injuries or physical issues, but with the amount of sitting at his office job, he has the same complaints as most sedentary-work individuals: stiffness and low-back tightness/"pain" (again not in any clinical sense) at the end of the work-day. Mr. JS successfully completed the reset-reinforce phases with the biggest take-aways being lifestyle changes (e.g. adding more "breaks" during the day, posture checking, breathing) and learning new self-myofascial release and stretches.

## **Corrective Rationale**

The reloading phase (previously mentioned in the author's M8 discussion) is an opportunity to ensure functional integration of the entire sensorimotor chain via exercise that not only appropriately challenges, but progresses the work accomplished in reset-reinforce. Under load and increasing challenge of the task performance, the goal is to maintain proper sequencing, timing, coordination, and control throughout the entire kinetic chain, but particularly attentive to the "previous problem areas" of the trunk, lumbopelvic hip complex (LPHC), and general posterior chain (McGill, 2010). Under duress, the client should maintain clean movement patterns (reset-reinforce), and the client should be vigilant to not regress back to dysfunctional movement patterns.

## **Corrective Exercises**

### **1. Glute Bridges.**

#### **Level 1. Segmental glute bridge.**

Refer to Verstegen and Williams (2014), p. 155.

#### **Level 2. Segmental glute bridge, lateral shift.**

Refer to Verstegen and Williams (2014), p. 156.

### **Level 3. Glute bridge, TRX.**

Place your heels in the cradles of the TRX. Perform a non-segmental (just a regular) bridge.

## **2. Push-up.**

### **Level 1. Standard.**

Perform the standard push-up according to Verstegen and Williams (2014), p. 244.

Key cuing:

If possible, have a spotter (or perform in front of mirror) to make sure that on every repetition, client's torso and hips come "up" as one unit (no stragglers, no break in the line). Use active hands to grip into the floor imagining trying to open a stuck jar. Use "sticky shoulders" and engaged core/trunk (as if about to receive a punch to the stomach). Gluteals should be engaged. Imagine pushing into the ground as if to move/depress the floor by 2 inches.

### **Level 2. Alternating legs.**

Following similar cuing and form, alternate legs (base of support). Push-up; lift the right leg; do a 1-legged push-up with the right leg in the air; then switch legs and etc.

Picture:

<http://fit.top.me/wp-content/uploads/2014/12/Alternating-Hand-and-Single-Leg-Push-Up.jpg>



### **Level 3. Crocodile push-up.**

Similar to Level 2, instead of the lifted leg in-line with the rest of the body, bring your lifted leg's knee out to the side of your body and as close to your elbow as possible.

Picture:

<http://www.womenshealthmag.com/sites/womenshealthmag.com/files/images/bootcamp-spiderman-pushup.jpg>



#### **Level 4. TRX push-up with prep.**

Refer to Verstegen and Williams (2014), p. 148, pillard bridge dynamic alternating arms in TRX. Successfully perform this prior to Verstegen and Williams (2014), p. 244, TRX push-up.

### **3. Dead-lift.**

Refer to Liebenson (2014), p. 293-296.

#### **Level 1. Kettlebell deadlift.**

Instead of using a bar, use a kettlebell. Maintain proper hip hinge and form (client should have been able to hip hinge during reset-reinforce stages). Engage tight grip, sticky shoulders, and engaged trunk (as if expecting a punch in the stomach).

#### **Level 2. Romanian deadlift to row.**

Refer to Verstegen and Williams (2014), p. 224.

#### **Level 3. Kettlebell deadlift, single-leg, two kettlebells.**

Refer to

[http://www.functionalmovement.com/exercises/239/deadlift\\_single\\_leg\\_single\\_arm\\_with\\_one\\_kb](http://www.functionalmovement.com/exercises/239/deadlift_single_leg_single_arm_with_one_kb)

Instead of using one kettlebell, use two (one in each hand) to make it easier as you are symmetrically loaded.

**Level 4. Kettlebell deadlift, single-leg, two kettlebells.**

Refer to Level 3. Now just use 1 kettlebell (asymmetrically loaded).

## Reference

- Liebenson, C. (2014). *Functional training handbook*. China: Wolters Kluwer.
- McGill, S. (2010). Core training: Evidence translating to better performance and injury prevention. *Strength & Conditioning Journal*, 32(3), 33-46.
- Verstegen, M., & Williams, P. (2014). *Every day is game day: The proven system of elite performance to win all day, every day*. New York, NY: The Penguin Group.