



VONGILLETTE

The Art and Science of Strength Training

Hot and Sexy Scapulae Training

Some individuals are smart and take care of their weak spots. If your quadriceps were extremely weak, you would train it, right. You might do some squats, single-leg squats, or both. But what if I told you that your scapulae was off, would you train it? Would you know how? And why should you care?

You might have heard that the real secret to shoulder health is the scapulae. If you've had shoulder impingement, rotator cuff problems, or just plain shoulder pain from doing too much bench pressing, chances are your scapula was involved. Without proper scapulae alignment and movement, the shoulder is just asking for pain and dysfunction. Good scapulae movement and alignment serves as a base for immense shoulder, chest, and upper back strength and muscular gains. How do we know if we do have good alignment and movement? Let's check.

Ideal Scapulae Alignment & Movement

If you have perfect scapular alignment, it will run parallel with the vertebra and is 3 inches from your spine. It is centered between the second and seventh vertebrae. Your scapula does not stick out ever – especially when raising and lowering your arms from overhead. Your scapula rotates 60 degrees with full shoulder flexion. With full shoulder flexion, the inferior angle of the scapulae should also be at the midaxillary line.

If your scapula does not exhibit ideal alignment and movement, then one or more of these conditions is likely present:

1. Downwardly Rotated
2. Upwardly Rotated
3. Depressed (in which it might need a therapist, but a physical one)
4. Elevated
5. Adducted
6. Abducted
7. Tilted
8. Wings

(Please note that while your left or right scapula is fine, the other may be impaired.)



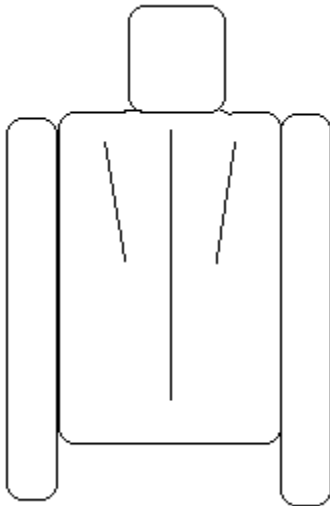
VONGILLETTE

The Art and Science of Strength Training

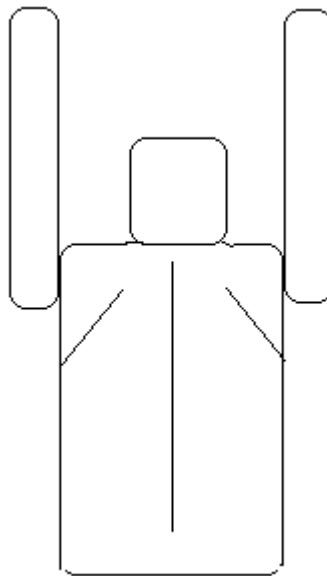
Downwardly Rotated

When your scapula alignment is downwardly rotated, the inferior angle will be closer to the spine than the superior angle. Downward rotation is also present if your scapula rotates less than 60 degrees with full shoulder flexion (even if the scapulae are downwardly rotated at rest or not). In either case, the downward rotators are likely tight and overactive. The downward rotators include your rhomboids, levator scapulae, and pec minor. Stretching and doing soft tissue work on the downward rotators are a great idea.

Just as important is getting the upward rotators which counteract downward rotation to do their job properly. The upward rotators are the serratus anterior, upper traps, and the lower traps. Exercises to train these are in the exercise section below.



Downwardly Rotated in Normal Standing Alignment



Scapulae only rotates 45 degrees instead of 60 degrees with full shoulder flexion

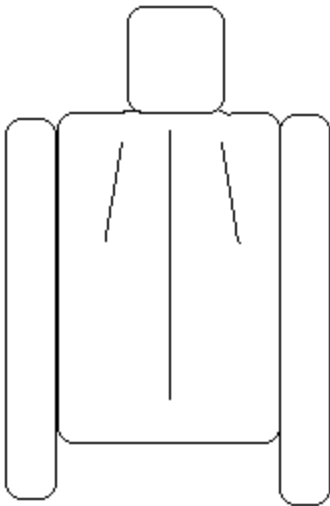


VONGILLETTE

The Art and Science of Strength Training

Upwardly Rotated

An upwardly rotated scapulae exhibit the opposite symptoms of downward rotation: a greater than 60 degree movement or a closer superior angle to the spine than inferior angle. This is likely due to tight upward rotators and more specifically a tight upper trapezius. Also, the scapular depressors and more specifically the rhomboids may be weak. Great exercises to train the rhomboids are seated rows and correct lat pulldowns.



Depressed

If you find that the scapulae are positioned lower than the second and seventh vertebrae, your scapulae are depressed. Depression is also present if the scapulae doesn't elevate or actually depresses during full shoulder flexion/abduction. In this case, it is likely due to inactivation of the upper trapezius. Contributing to the problem may be tight depressor muscles including the pec major and the latissimus dorsi which should be stretched.

Consider in scapular depression that the lower traps may not need to be strengthened as they are a scapular depressor and may be tight/overactive. Regular shrugs with arms at the side may be a good idea to get at the upper trapezius without hitting the lower trapezius.



VONGILLETTE

The Art and Science of Strength Training

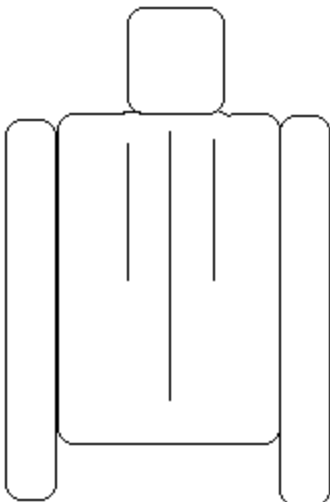
Elevated

Your scapulae are elevated if the scapulae (excluding the acromion) are between the second and seventh vertebrae. The scapular elevators (upper trapezius, rhomboids, and levator scapulae) will be overactive and/or tight. Also, the pec major, pec minor, and the latissimus dorsi which are the scapular depressors may be weak and/or long. Commonly accompanying scapular elevation is also scapular adduction. All of the muscles mentioned above which contribute to scapulae elevation also contribute to scapular adduction.

The tightness of the middle and upper back usually responds very well to static stretching as well as to soft-tissue work as such as a softball.

Adducted

Scapular adduction is evident if the medial border of your scapulae is closer than 3 inches from your spine. As stated above, the scapular adductors, namely the upper trapezius and the rhomboids may be very tight and in need of stretching and soft-tissue work. An antagonist to scapular adduction, the serratus anterior may be long and/or weak. Be aware of any winging or tilting of the scapulae which would also indicate inactivation of the serratus anterior. If the inferior angle of the scapulae does not reach the midaxillary line, this also points towards an inadequate serratus anterior. Activation work and push-ups are awesome to get this often dormant muscle out of hibernation.





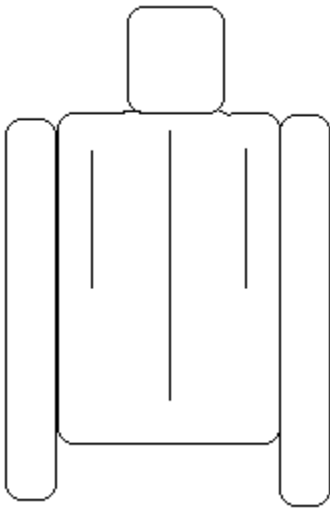
VONGILLETTE

The Art and Science of Strength Training

Abducted

This impairment is usually exhibited in full shoulder flexion/abduction. If the scapula extends beyond the midaxillary line with full shoulder flexion/abduction, it is abducted.

Scapular abduction can be caused by a tight pec major, pec minor and serratus anterior. The scapular adductors including the rhomboids, upper trapezius, and middle trapezius may be weak and/or long. If the scapulae is not achieving 60 degrees of upward rotation, the upper traps may not have the strength to upwardly rotate the scapulae.



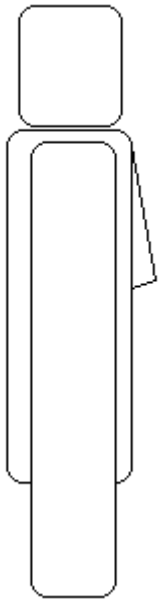


VONGILLETTE

The Art and Science of Strength Training

Tilted

The inferior (or lower) angle of the scapulae sticks out of the back. This is different than scapular winging in which the entire vertebral border of the scapulae sticks out. Scapular tilting is likely due to a short pec minor, biceps brachii, or the anterior deltoid. Stretching the pec minor can be difficult, but if done appropriately can lead to dramatic results.



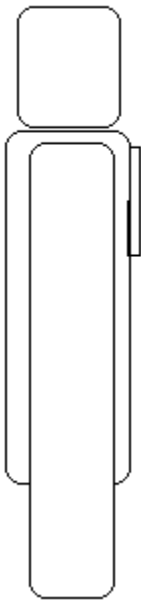


VONGILLETTE

The Art and Science of Strength Training

Wings

If the vertebral border of the scapulae sticks out while either relaxed or while raising or lowering your arms, your serratus anterior is likely weak. The serratus anterior's job is to keep the scapulae close to the thorax. Watch out for a scapulae which does not reach the thoracic midaxillary line which also indicates a weak serratus anterior. Again, serratus anterior activation work is indicated. Overhead shrugs are a great exercise which utilize the serratus anterior in its upward rotator role.



Conclusion

Hopefully this article will give you some new ideas on how to treat your shoulder problems or your clients. And next time you go to the beach, you can finally pick up that hottie by exclaiming “wow, you got a great pair of *scapulae*.” You can then explain how her alignment is good, but you really need to check her movement. It's been done and it works – that is scapulae training.