Standing Wall Supported Resisted Ischial Femoral Ligamentous Stretch

(Standing Left Posterior Capsule Inhibition #4)

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Let's begin with the title of this PRI Non-Manual Technique.

You will need to purchase approximately 5 to 7 feet of medium resistant therapeutic tubing. You can find information on the PRI Website under "Products" (and then click on "Materials") and purchase from Stretch Well, green colored medium elastic tubing. The Stretch Therapy Deluxe green tubing has hand handles included. However, you can perform this activity without band resistance, by placing your hands on the edge of a chair that easily slides forward as you reach forward. You will also need to find a book that is approximately 1 to 3 inches in height, at least 12 inches long and 7 to 10 inches deep.

When performing this activity in "standing" you will be able to use the floor as an anchor and a "wall" as "support" for distraction of your lower and upper posterior chest walls. [This position on the floor and on the wall will allow you to primarily sense and focus on mid to low back lengthening as the accompanying posterior and lateral chest walls expand]. As you move your arms forward in performing the following outlined activity, the "ligamentous" soft tissue, including your accompanying hamstring muscle, that attaches to your "ischial" seat or sit bone and to your "femur" or thigh bone, more than likely, will feel tight. This tightness and/or "stretch" is the result of your abdominal wall of muscle contracting, as you reach forward with "resistance" from the therapeutic bands in your hands and the bands of elastic, soft tissue attached to your "ischial seats". Therefore, the floor you are "standing" on, the "wall" your low back and hips are resting on, and the bands that are looped around the hands or the friction from the legs of the chair the hands are resting and pushing forward on, are all providing the forces needed for your left and right diaphragm leaflets, inside your two respective chest chambers, to open and expand and stretch both the inside and outside chest walls. This expansion, under the above guided resistance, allows one chest chamber to ideally open better when closure of the other chest chamber occurs, and vice versa. This PRI Chest Wall technique, minimizes pulmonary or lung static function, maximizes elastic tissue recoil of the chest walls, equalizes pressure when all four extremities are alternating or involved with lifting, and assists with optimizing immune responses.

Here are some additional comments about the steps that follow the title and pictorial examples, along with the reasoning for the procedural step.

Stand with your feet parallel to each other and with your hips directly over your feet. Place a book that is 7 to 10 inches deep between the door and the back of your heels. The back of your heels will help you sense the wall you are about to touch with your low back and hips. This heel sense, together with the sense of the floor you are standing on, will provide the anchoring your abdominal wall will require for upon contracting as you reach forward with your hands to relax and open your posterior chest wall and or back muscles.

By also anchoring therapeutic tubing in the door at a height slightly above shoulder level, and

around both of your hands, you will begin to sense the need to engage your abs, lower your head and shoulders and move your upper chest walls forward as your mid back and chest walls simultaneously move back. The same type of activity will occur if you place your hands on the top of a chair or stool on wheels.

If you have difficulty sensing your abdomen muscles contract and it is difficult to round out your middle to lower part of your back, your anterior chest wall is too elevated. Place a rolled-up towel between the upper part of your thighs, as high as you can get it. This rolled-up towel should be wide enough so that when you bring your knees together your knees will not touch. By placing this bolster between your upper thighs and squeezing your knees toward each other, your back muscles will relax and your ligaments at the back of your hips will be more easily stretched out as you lower your body with your muscles that attach to the two ischial seats. These muscles are called your hamstrings and will enable you to maximize your diaphragm's influence on chest wall mechanical activity that will enable better upright perfusion of oxygen into posterior and lateral lobes of the lungs, that may be 'locked up' because of over contracting back muscles used for postural stabilization. Therefore, by pulling your two hips apart with the bolster between the knees, that are moving toward each other, you are essentially decompressing not only the pelvis that lies between the hips, but also the spine that lies between both chest walls. This decompression of the 'chest wall' spine decongests the lung tissue associated with congestion of lung tissue (alveola) that is incapable of opening because of spinal compression. By squeezing the bolster between your thighs, as you are doing with this PRI technique, you are essentially reducing the 'squeeze' on the posterior lungs.

To place as much low back on the wall that you can, in Step 4, you may want to slowly and carefully bring your knees slightly forward as you are exhaling through your pursed lips. Try to keep your heels and feet flat on the floor as you are reaching forward with your outstretched hands and arms. Many of you will not be able to place your low back on the wall, and may only be able to sense your rear on the wall, as you attempt to round your back while reaching forward with your arms and knees as your body gently lowers. The most important thing about Step 4, is to reach with your hands and arms, resisted or unresisted, while you "round" your mid to low back, during this exhalation phase of movement.

Step 5, is where the magic happens. The magic is when your inhalation effort through your nose, after performing Step 4, continues to open up the entire chest wall cavities on both sides, along with all the underlying alveolar tissue in your lungs. The position you worked so hard in achieving is now serving as a platform for diaphragmatic inhalation without resorting to muscles that over compress the posterior lung tissue. Those muscles lie both directly in front of your neck and in the back of your chest walls. As you continue to breathe in through your nose and out through your mouth, or through pursed lips, let the air move your chest. Assist this chest movement by drawing in the air (Step 7) and compressing it out by reaching further forward with your arms, as the weight of your anterior body opens up the posterior body (Step 8).

The resistance provided by the forces through the arms, the wall and the floor allow you to receive the floor, the wall and the space in front of your arms as the space inside of your chest walls expand and elevate your body; as it is being lowered gently, softly and peacefully to the ground. When you stand up, in Step 10, focus on maintaining "push" through the heels, the

hands and the inner thighs as your entire chest remains opened, relaxed and uncoiled. Breathing should be effortless at this stage, because of true postural support offered by muscles that keep the posterior chest walls elevated, and the anterior chest wall opened and lowered, for maximum lung perfusion and ventilation.