

REHABILITATION FOR HIP AND PELVIS MUSCLE DYSFUNCTION: HIP ADDUCTION SYNDROME

THE CONDITION

The hip and pelvis consist of an intricate complex of muscles, ligaments, tendons, and bony structures. Under the control of the body's nervous system, these structures undergo a kinetic chain of events, and result in movement patterns that allow us to sit, walk, run, etc. This kinetic chain may be altered as a result of muscle tightness, weakness, poor biomechanics, nerve interference, and/or muscular imbalance, thus predisposing the body to injury and dysfunction.

Often, dysfunction within the hip/pelvis complex results in something we call a **Movement Impairment Syndrome**. Movement Impairment Syndromes occur when there is altered joint motion in a specific direction, resulting in pain and discomfort in tissues supporting the joint. The pain related to such a syndrome arises from negative changes in muscle participation and patterns of muscle recruitment. One such common condition is called the **Hip Adduction Syndrome**.

Hip Adduction Syndrome is characterized by excessive adduction of the hip, meaning that the thighbone tends to be angled more towards the mid-line of your body. This often occurs in combination with inward rotation of the thighbone. With this syndrome, we will often find imbalances between the muscles that flex (hip flexors) and rotate the thighbone inwards (hip internal/medial rotators), with the muscles that extend (hip extensors) and rotate the thighbone outwards (hip external/lateral rotators).



Individuals with this syndrome often have pain in the area of the gluteus medius muscle (hip abductor) just above the bony part of the hip, deep in the hip, and deep in the buttock that may radiate down the leg. Commonly, there is also a burning and aching pain along the outside of the thigh that becomes more painful with further stretching. Hip Adduction Syndrome is more commonly found in individuals that participate in activities such as running and cycling. **As the external rotators and abductor muscles are already weak and lengthened, stretching of these muscles is not recommended.**

Whether these muscles have become tight, weak, painful, or any combination of symptoms, there are a number of activities that you can do to speed their healing and help prevent further injury. In conjunction, regular chiropractic care and adjunct therapies will help to decrease the resting muscle tension of these muscles and improve their function.

TREATMENT AND REHABILITATION

Objectives of your treatment and rehabilitation of Hip Adduction Syndrome are to:

1. Improve overall motion and function of the hip, in particular improving the strength of the hip abductors and external rotator muscles.
2. Utilization of corrective exercises to restore normal hip motion and gain lasting benefit by strengthening weakened tissues, and stretching tight tissues.

*Note: Initially, a cane may be used to reduce the stress on the abductor muscles.

Rehabilitation Exercises

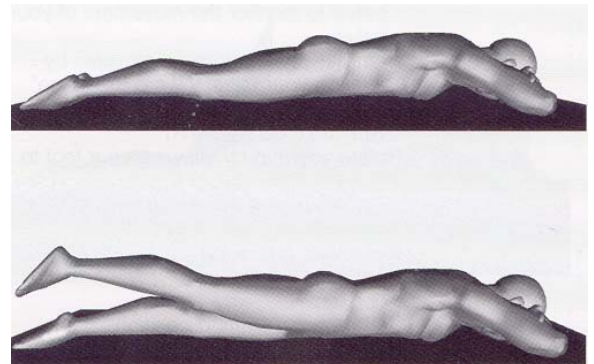
1. Hip Extension with Knee Extended

Purpose: to stimulate buttock muscle contraction while avoiding excessive hip extension.

Method:

- i. Start lying face down with your legs straight and relatively close together. Place a pillow under your hips to maintain a flexed hip position.
- ii. While maintaining a tight abdomen, slowly raise one leg up off the floor and think about turning your leg slightly outward as you contract your buttock muscle. Do not lift your leg high, as only 10° or a few inches are required to adequately activate the gluteus maximus.
- iii. Slowly lower your leg back to the floor. Alternate legs.

Instructions: Sets: 2-3; Reps: 15-20
Hold: 4-10 sec
Rest: 30-60 sec
Frequency: 5xweek



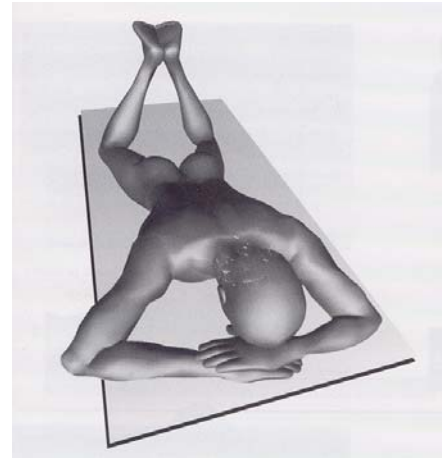
2. **Bilateral Isometric Lateral Hip Rotation**

Purpose: To improve the performance of the hip outward rotator muscles.

Method:

- i. Lay face down with knees apart and bent. (You may place a pillow under your abdomen if it is more comfortable)
- ii. Slowly allow your hips to rotate so that your feet touch. Squeeze your buttocks while pushing your feet together

Instructions: Reps: 2x
 Hold: 15 sec
 Frequency: 2x/day



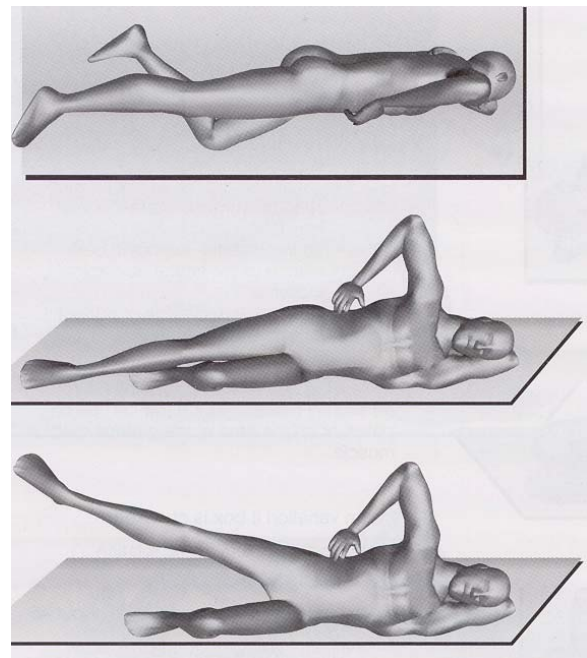
3. **Hip Abduction with slight External Rotation and Hip Extension**

Purpose: to stimulate the buttock muscles and change movement patterns.

Method:

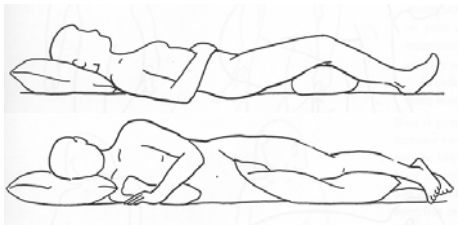
- i. Begin in a side-lying position with the bottom hip and knee slightly bent. The pelvis should be rotated slightly forward. The top hand can be placed over the hip.
- ii. With the top leg straight out, raise the top leg slightly away from the bottom leg.
- iii. Outwardly rotate the entire leg so the kneecap is pointing slightly upward and continue lifting your thigh at the hip joint. Keep the pelvis square and stable throughout the motion. Do not lift the leg very high.
- iv. Slowly lower your leg to the starting position. Alternate legs.

Instructions: Sets: 2-3; Reps: 15-20
 Hold: 4-10 sec
 Rest: 30-60 sec
 Frequency: 5x/week



Postural considerations

1. Keep your body weight evenly placed on both feet while standing.
2. When rising from or lowering to a seated position, do not allow your knees to come together.
3. If you sit for long periods of time, stand every 30 minutes and contract your buttocks.
4. Avoid cross-legged sitting (promotes inward rotation).
5. Sleeping on your back with a pillow beneath the knees is generally the best; however this may not be possible due to pain and discomfort in the buttock muscles. If this is the case, try lying on the unaffected side with a pillow between the knees, ensuring that the knees are directly on top of one another to minimize pelvic rotation and hip adduction.



Note: *It is important for you to follow any specific instructions given to you by your Health Care Professional. Your active participation in your rehabilitation will dramatically improve your recovery time and aid in the effectiveness of your in-office treatments. If you have any questions regarding the information provided in this handout, please don't hesitate to contact your Health Care Professional..*