

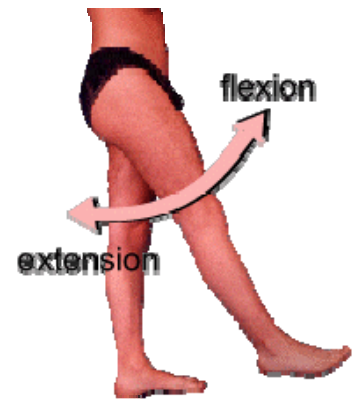
REHABILITATION FOR HIP AND PELVIS MUSCLE DYSFUNCTION: FEMORAL ANTERIOR GLIDE SYNDROME

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 about the joint. The pain related to such a syndrome arises from impairments in muscle participation and patterns of muscle recruitment. One such common condition is called Femoral Anterior Glide Syndrome.

Femoral Anterior Glide Syndrome occurs when the head of the femur is unable to undergo its proper backwards-gliding motion into the hip joint with hip flexion. Instead, the head of the femur is forced forwards in the joint, resulting in an improper movement pattern. As a result, pressure may be placed against the structures at the front of your hip, thus leading to pain and discomfort. This syndrome is often wrongly diagnosed as a hip flexor tendonitis. Although the tendon may be the source of pain and discomfort, the cause is a result of pressure exerted by the head of the femur against the structures at the front of the hip joint. This movement impairment syndrome is most common with activities that emphasize hip extension, such as long distance running, walking, and dancing. Although it may feel good to do so, **stretching the hip flexors is not recommended in this syndrome.**



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 Femoral Anterior Glide Syndrome are to:

1. Improve backwards glide of the head of the femur to improve overall motion and function of the hip.
2. Perform corrective exercises to restore normal hip motion and gain lasting benefit by strengthening weakened tissues, and stretching tight tissues.

Rehabilitation Exercises

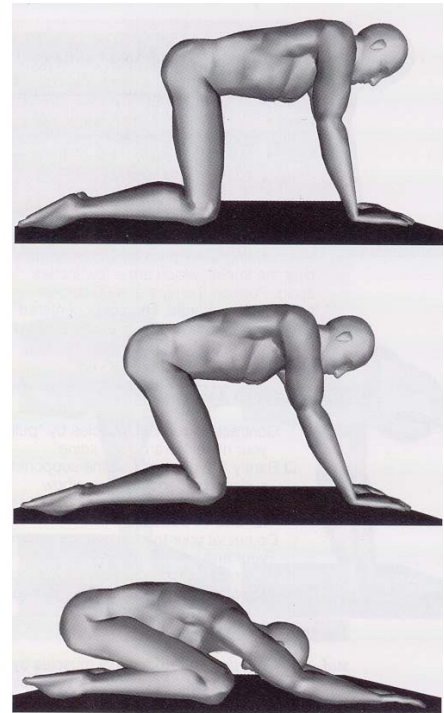
1. **Rocking – Quadruped Position**

Purpose: to stretch the hip extensor muscles, relax the hip flexor muscles, and promote proper hip motion.

Method:

- i. Start on all fours with your shoulders centred over your hands and your hips centred over your knees. Hips should be at 90°, spine is straight, and head is in line with your body.
- ii. Rock backwards part of the way towards your heels.
- iii. Rock backwards as far as possible and try to touch your butt to your heels. Push back with your hands, and stretch out your arms while keeping your back straight.
- iv. Rock forward while contracting your stomach muscles and return to resting position.

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



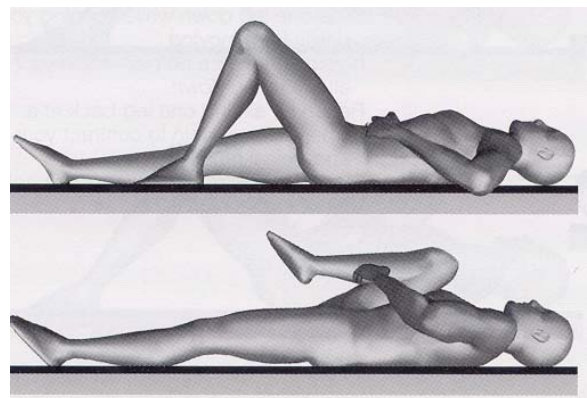
2. **Passive Hip Flexion**

Purpose: to relax the hip flexor muscles.

Method:

- i. Lie on your back with one leg straight and the other hip and knee bent.
- ii. Use your hands or a towel under your thigh to pull your knee to your chest. Be sure to relax the hip muscles as you pull your knee to your chest.
- iii. Slowly lower your leg back to the starting position without using the hip flexors. Alternate legs.

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



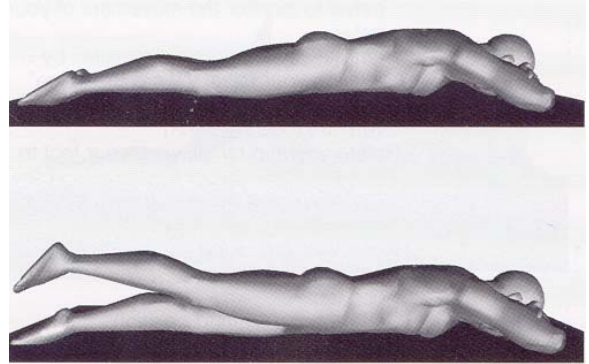
3. **Hip Extension with Knee Extended**

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 several 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: 5x/week



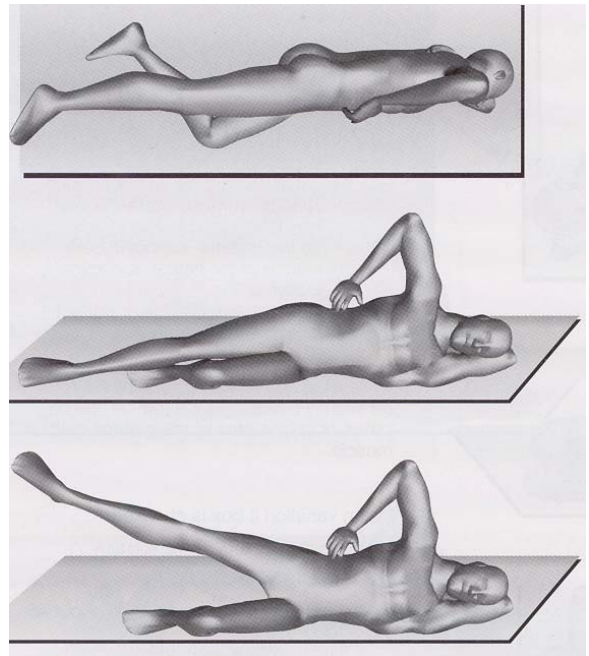
4. **Hip Abduction with slight External Rotation and Hip Extension**

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



5. One-Legged Stance: Unilateral Hip and Knee Flexion

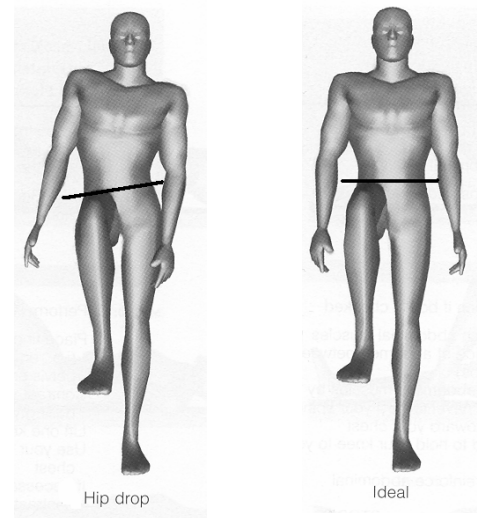
Purpose: to improve the performance of the hip and core muscles, and to prevent inward rotation of the femur.

Method:

- i. With feet relatively close together, shift your weight to one leg and tighten your buttock muscles on that side.
- ii. Slowly lift your other thigh up in front of you while bending the knee. Do not allow the hip to drop.
- iii. Slowly lower your leg down to starting position. Alternate legs.

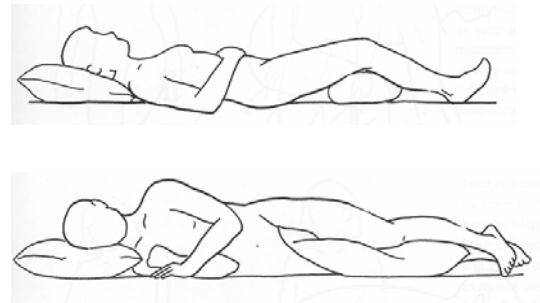
Instructions: Reps: 1-2 min

Frequency: 5x/week



Postural considerations

1. Avoid cross-legged sitting (promotes inward rotation).
2. 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.
3. You are encouraged to consciously contract your buttock muscles at heel strike when walking. This will help decrease hamstring domination during your gait cycle.



Note: It is important for you to follow any specific instructions given to you by your health 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 ask.