

# GLUTEUS MEDIUS SYNDROME



## ■ ■ ■ Description

Gluteus medius syndrome is characterized by inflammation and pain at the outer hip caused by strain of the gluteus medius muscle and its tendon attachment to the femur. The gluteus medius muscle attaches the pelvis to the outer hip. This muscle stabilizes the hip when walking, running and jumping, and moving the leg and thigh away from the other leg and thigh. The syndrome is usually a grade 1 or 2 strain of the tendon. A *grade 1 strain* is a mild strain. There is a slight pull without obvious tearing of tissue (it is microscopic muscle-tendon tearing). There is no loss of strength, and the muscle-tendon unit is the correct length. A *grade 2 strain* is a moderate strain. There is tearing of fibers within the substance of the muscle-tendon unit in the tendon, in the muscle, or where the tendon meets the muscle or bone. The length of the whole muscle-tendon-bone unit is increased, and there is usually decreased strength. A *grade 3 strain* is a complete rupture of the muscle-tendon unit and is rare.

## ■ ■ ■ Common Signs and Symptoms

- Pain and often a limp with walking or running
- Tenderness over the outer hip
- Pain, tenderness, swelling, warmth, or redness over the outer thigh, often worsened by moving the hip
- Often, weakness of the hip (especially when spreading the legs and hips against resistance)

## ■ ■ ■ Causes

Gluteus medius syndrome may occur without any injury. It may be due to strain from a sudden increase in the amount or intensity of activity or overuse of the lower extremity. Usually, this condition is associated with tilting of the pelvis with running.

## ■ ■ ■ Risk Increases With

- Endurance sports (distance runners, triathletes, race walkers), especially running along street curbs and banked surfaces or if the foot crosses the midline toward the other leg when running
- Poor physical conditioning (strength and flexibility)
- Inadequate warm-up before practice or play
- Legs of unequal length (affects longer leg)
- Alignment problems of the lower extremity, including wide pelvis and excessively knocked knees

## ■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
  - Hip, pelvis, and trunk strength
  - Flexibility and endurance
  - Cardiovascular fitness

- Use proper running technique.
- Wear shoe lifts (orthotics) if legs are not equal in length.

## ■ ■ ■ Expected Outcome

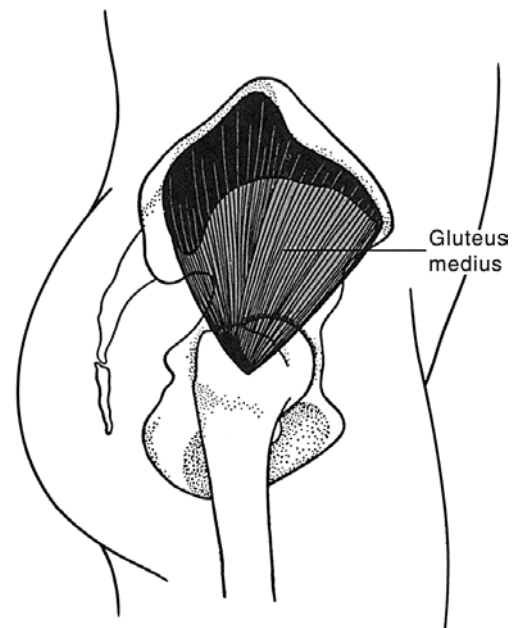
This condition is usually curable with time and appropriate treatment. Healing time varies but usually averages 2 to 6 weeks.

## ■ ■ ■ Possible Complications

- Prolonged healing time if not appropriately treated or if not given adequate time to heal
- Chronically inflamed tendon, causing persistent pain with activity that may progress to constant pain
- Recurrence of symptoms if activity is resumed too soon, with overuse, with a direct blow, or if using poor technique

## ■ ■ ■ General Treatment Considerations

Initial treatment consists of medication and ice to relieve the pain, stretching and strengthening exercises, and modification of the activity that initially caused the problem. These all can be carried out at home, although referral to a physical therapist or athletic trainer for further evaluation and treatment may be helpful. An orthotic (shoe lift) for those with legs of unequal length may be prescribed to reduce stress to



LATERAL VIEW

Figure 1

From Hislop HJ, Montgomery J: Daniels and Worthingham's Muscle Testing—Techniques of Manual Examination, 6th ed. Philadelphia, WB Saunders, 1995, p. 182.

the tendon. An injection of cortisone to the area of inflammation may be recommended. Surgery to remove the inflamed tendon lining or degenerated tendon tissue is rarely required and often only considered after at least 6 months of conservative treatment.

### ■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Pain relievers are usually not prescribed for this condition. If prescribed by your physician, use only as directed and only as much as you need.
- Cortisone injections reduce inflammation. However, this is done only in extreme cases; there is a limit to the number of times cortisone may be given because it weakens muscle and tendon tissue. Anesthetics temporarily relieve pain.

### ■ ■ ■ Heat and Cold

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

### ■ ■ ■ Notify Our Office If

- Symptoms get worse or do not improve in 2 weeks despite treatment
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

**> RANGE OF MOTION AND STRETCHING EXERCISES • Gluteus Medius Syndrome**

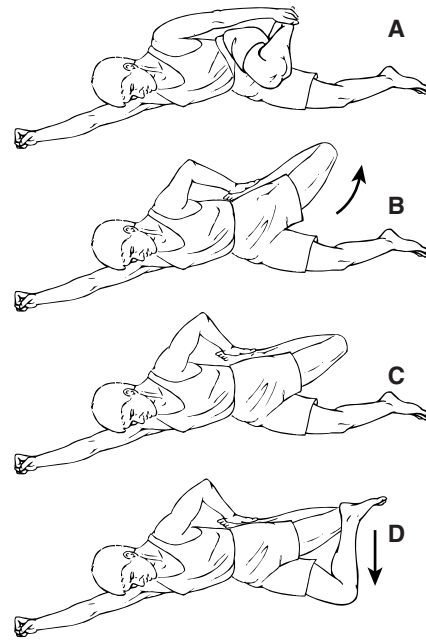
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A *gentle* stretching sensation should be felt.



**FLEXIBILITY • Hip Rotators**

1. Lie on your back. Bend your hip and knee up as shown, grasping them with your hands.
2. Pull your leg/knee toward your opposite shoulder.
3. You will feel a stretch on the outside of your hip near your buttocks.
4. Hold this position for \_\_\_\_\_ seconds.
5. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



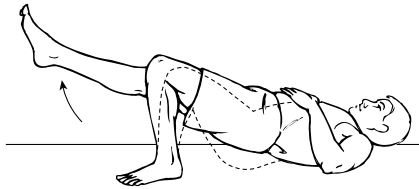
**ILIOTIBIAL BAND STRETCH**

1. Lie on your side as shown. The muscle/iliotibial band to be stretched should be on top.
2. With your hand, grasp your ankle and pull your heel to your buttocks and bend your hip so that your knee is pointing forward as in the top drawing (A).
3. Rotate your hip up so that your thigh is away from your body as shown and in line with your body. Keep your heel to your buttocks (B).
4. Bring the thigh back down and behind your body. Do not bend at the waist. Keep your heel pressed to your buttocks (C).
5. Place the heel of your opposite foot on top of your knee and pull the knee/thigh down farther. You should feel a stretch on the outside of your thigh near your kneecap (D).
6. Hold this position for \_\_\_\_\_ seconds.
7. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

> **STRENGTHENING EXERCISES** • Gluteus Medius Syndrome

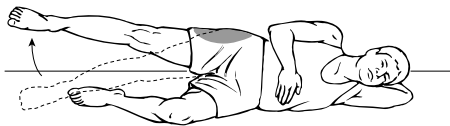
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Strong muscles with good endurance tolerate stress better.
- Do the exercises as *initially* prescribed by your physician, physical therapist, or athletic trainer. Progress slowly with each exercise, gradually increasing the number of repetitions and weight used under their guidance.



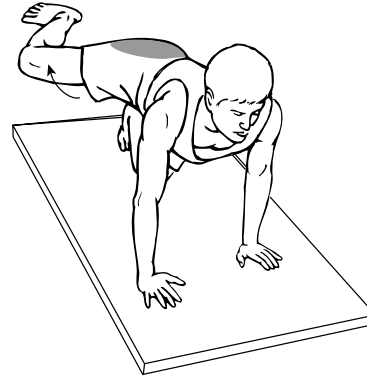
**STRENGTH** • Hip Extension

1. Lie on your back with your knees bent and feet flat on the floor.
2. Push down, raising your hips/buttocks off the floor.
3. Keep your pelvis level. Do not allow it to turn/rotate.
4. You may do this exercise with both legs together (which is easier) or with just one leg as shown (which is harder). Hold this position for \_\_\_\_ seconds.
5. Slowly lower to the starting position.
6. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



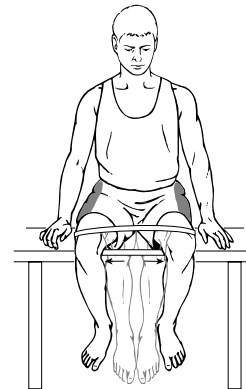
**STRENGTH** • Hip Abduction

1. Lie on your side as shown with the injured/weak leg on top.
2. Bend the bottom knee slightly for balance. Roll your top hip slightly forward.
3. Lift your top leg straight up, leading with your heel. Do not let it come forward. Hold this position for \_\_\_\_ seconds.
4. Slowly lower your leg to the starting position.
5. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



**STRENGTH** • Hip Abduction in Quadruped

1. Position yourself on your hands and knees as shown.
2. Keeping your knee bent, lift it up and out to the side from the hip. Hold this position for \_\_\_\_ seconds.
3. Slowly lower your knee to the starting position.
4. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.



**STRENGTH** • Hip Abductors

1. Sit on a chair or table as shown.
2. Place the rubber tubing/band around your thighs just above your knees.
3. Spread your legs as wide as possible. Hold this position for \_\_\_\_ seconds.
4. Slowly return to the starting position.
5. Repeat exercise \_\_\_\_ times, \_\_\_\_ times per day.

Notes:

(Up to 4400 characters only)

Notes and suggestions