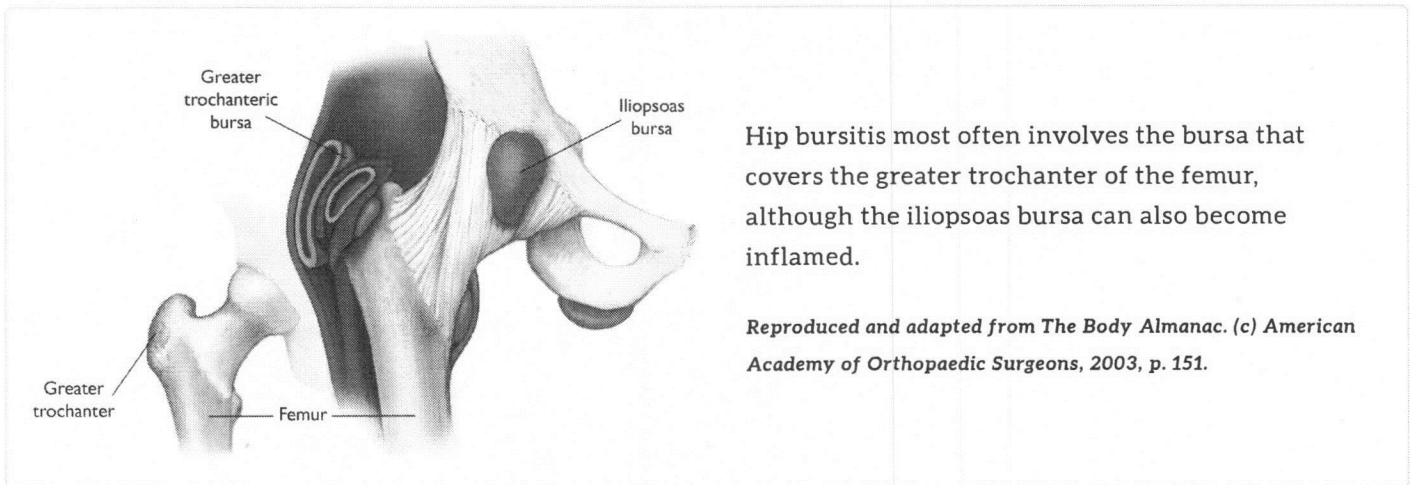


## Hip Bursitis

Bursae, are small, jelly-like sacs that are located throughout the body, including around the shoulder, elbow, hip, knee, and heel. They contain a small amount of fluid, and are positioned between bones and soft tissues, acting as cushions to help reduce friction.

Bursitis is inflammation of the bursa. There are two major bursae in the hip that typically become irritated and inflamed. One bursa covers the bony point of the hip bone called the greater trochanter. Inflammation of this bursa is called trochanteric bursitis.

Another bursa — the iliopsoas bursa — is located on the inside (groin side) of the hip. When this bursa becomes inflamed, the condition is also sometimes referred to as hip bursitis, but the pain is located in the groin area. This condition is not as common as trochanteric bursitis, but is treated in a similar manner.



Hip bursitis most often involves the bursa that covers the greater trochanter of the femur, although the iliopsoas bursa can also become inflamed.

*Reproduced and adapted from The Body Almanac. (c) American Academy of Orthopaedic Surgeons, 2003, p. 151.*

## Symptoms

The main symptom of trochanteric bursitis is pain at the point of the hip. The pain usually extends to the outside of the thigh area. In the early stages, the pain is usually described as sharp and intense. Later, the pain may become more of an ache and spread across a larger area of the hip.

Typically, the pain is worse at night, when lying on the affected hip, and when getting up from a chair after being seated for a while. It also may get worse with prolonged walking, stair climbing, or squatting.

## Risk Factors

Hip bursitis can affect anyone, but is more common in women and middle-aged or elderly people. It is less common in younger people and in men.

The following risk factors have been associated with the development of hip bursitis.

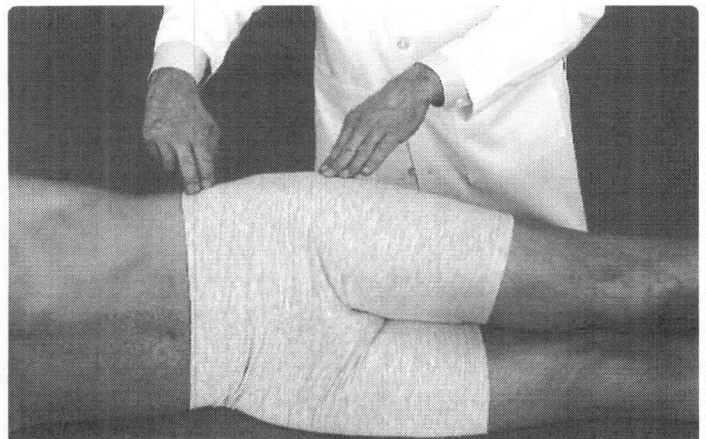
- **Repetitive stress (overuse) injury.** This can occur when running, stair climbing, bicycling, or standing for long periods of time.
- **Hip injury.** An injury to the point of your hip can occur when you fall onto your hip, bump your hip, or lie on one side of your body for an extended period of time.
- **Spine disease.** This includes scoliosis, arthritis of the lumbar (lower) spine, and other spine problems.
- **Leg-length inequality.** When one leg is significantly shorter than the other, it affects the way you walk, and can lead to irritation of a hip bursa.
- **Rheumatoid arthritis.** This makes the bursa more likely to become inflamed.
- **Previous surgery.** Surgery around the hip or prosthetic implants in the hip can irritate the bursa and cause bursitis.
- **Bone spurs or calcium deposits.** These can develop within the tendons that attach muscles to the trochanter. They can irritate the bursa and cause inflammation.

## Doctor Examination

To diagnose hip bursitis, the doctor will perform a comprehensive physical examination, looking for tenderness in the area of the point of the hip. He or she may also perform additional tests to rule out other possible injuries or conditions. These tests can include imaging studies, such as x-rays, bone scanning, and magnetic resonance imaging (MRI).

Your doctor will check for tenderness over the bony point of the hip bone.

*Reproduced and adapted from AD Armstrong, MC Hubbard (eds.): Essentials of Musculoskeletal Care, ed. 5. Rosemont, IL, American Academy of Orthopaedic Surgeons, 2016, p. 663.*



## Treatment

### ***Nonsurgical Treatment***

The initial treatment for hip bursitis does not involve surgery. Many people with hip bursitis can experience relief with simple lifestyle changes, including:

- **Activity modification.** Avoid the activities that worsen symptoms.
- **Nonsteroidal anti-inflammatory drugs (NSAIDs).** Ibuprofen, naproxen, piroxicam, celecoxib, and others, may relieve pain and control inflammation. Use NSAIDs cautiously and for limited periods. Talk with your doctor about the NSAIDs you use. NSAIDs may have adverse side effects if you have certain medical conditions or take certain medications.
- **Assistive devices.** Use of a walking cane or crutches for a week or more when needed.
- **Physical therapy.** Your doctor may prescribe exercises to increase hip strength and flexibility. You may do these exercises on your own, or a physical therapist may teach you how to stretch your hip muscles and use other treatments such as rolling therapy (massage), ice, heat, or ultrasound.
- **Steroid injection.** Injection of a corticosteroid along with a local anesthetic may also be helpful in relieving symptoms of hip bursitis. This is a simple and effective treatment that can be done in the doctor's office. It involves a single injection into the bursa. The injection may provide temporary (months) or permanent relief. If pain and inflammation return, another injection or two, given a few months apart, may be needed. It is important to limit the number of injections, as prolonged corticosteroid injections may damage the surrounding tissues.

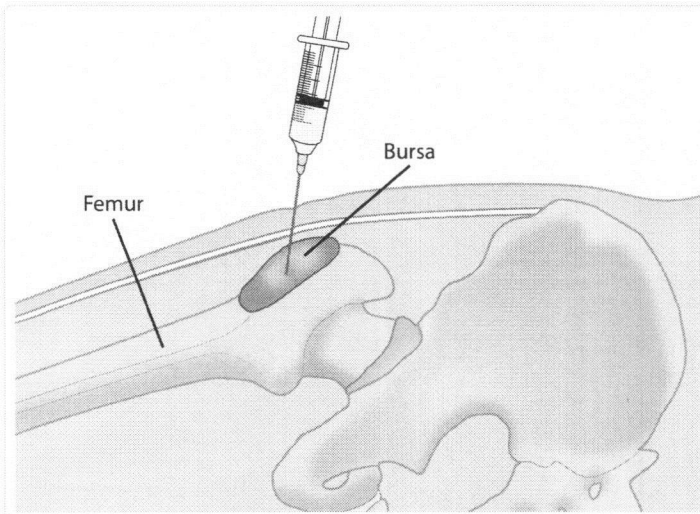


Illustration shows a corticosteroid injection into the trochanteric bursa.

## ***Surgical Treatment***

Surgery is rarely needed for hip bursitis. If the bursa remains inflamed and painful after all nonsurgical treatments have been tried, your doctor may recommend surgical removal of the bursa. Removal of the bursa does not hurt the hip, and the hip can function normally without it.

A newer technique that is gaining popularity is arthroscopic removal of the bursa. In this technique, the bursa is removed through a small (1/4-inch) incision over the hip. A small camera, or arthroscope, is placed in a second incision so the doctor can guide miniature surgical instruments and cut out the bursa. This surgery is less invasive, and recovery is quicker and less painful.

Both types of surgeries are done on an outpatient (same-day) basis, so an overnight stay in the hospital is not usually necessary. Early research shows arthroscopic removal of the bursa to be quite effective, but this is still being studied.

## Rehabilitation

Following surgery, a short rehabilitation period can be expected. Most patients find that using a cane or crutches for a couple of days is helpful. It is reasonable to be up and walking around the evening after surgery. The soreness from surgery usually goes away after a few days.

## Prevention

Although hip bursitis cannot always be prevented, there are things you can do to prevent the inflammation from getting worse.

- Avoid repetitive activities that put stress on the hips.
- Lose weight if you need to.
- Get a properly fitting shoe insert for leg-length differences.
- Maintain strength and flexibility of the hip muscles.

### Last Reviewed

September 2018

### Contributed and/or Updated by

Jared R.H. Foran, MD

### Peer-Reviewed by

Stuart J. Fischer, MD

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## Hip Conditioning Program

### *Purpose of Program*

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After an injury or surgery, an exercise conditioning program will help you return to daily activities and enjoy a more active, healthy lifestyle. Following a well-structured conditioning program will also help you return to sports and other recreational activities.

This is a general conditioning program that provides a wide range of exercises. To ensure that the program is safe and effective for you, it should be performed under your doctor's supervision. Talk to your doctor or physical therapist about which exercises will best help you meet your rehabilitation goals.

**Strength:** Strengthening the muscles that support your hip will help keep your hip joint stable. Keeping these muscles strong can relieve pain and prevent further injury.

**Flexibility:** Stretching the muscles that you strengthen is important for restoring range of motion and preventing injury. Gently stretching after strengthening exercises can help reduce muscle soreness and keep your muscles long and flexible.

**Target Muscles:** The muscle groups targeted in this conditioning program include:

- Gluteus maximus (buttocks)
- Gluteus medius (buttocks)
- Hamstrings (back of thigh)
- Piriformis (buttocks)
- Adductors (inner thigh)
- Abductors (outer thigh)
- Tensor Fascia (outer thigh)

**Length of program:** This hip conditioning program should be continued for 4 to 6 weeks, unless otherwise specified by your doctor or physical therapist. After your recovery, these exercises can be continued as a maintenance program for lifelong protection and health of your hips and thighs. Performing the exercises two to three days a week will maintain strength and range of motion in your hips and thighs.

### *Getting Started*

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**Warm up:** Before doing the following exercises, warm up with 5 to 10 minutes of low impact activity, like walking or riding a stationary bicycle.

**Stretch:** After the warm-up, do the stretching exercises shown on Page 1 before moving on to the strengthening exercises. When you have completed the strengthening exercises, repeat the stretching exercises to end the program.

**Do not ignore pain:** You should not feel pain during an exercise. Talk to your doctor or physical therapist if you have any pain while exercising.

**Ask questions:** If you are not sure how to do an exercise, or how often to do it, contact your doctor or physical therapist.

### Additional Notes



## Hip Conditioning Program STRETCHING EXERCISES

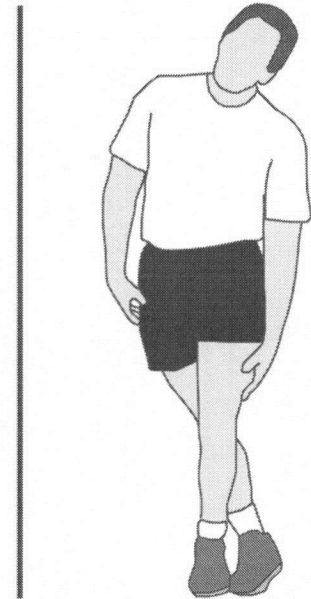
### 1. Standing Iliotibial Band Stretch

<b>Repetitions</b>	Main muscles worked: Tensor fascia You should feel this stretch at the outside of your hip
2 sets of 4	
<b>Days per week</b>	Equipment needed: None
Daily	

#### Step-by-step directions

- Stand next to a wall for support
- Cross the leg that is closest to the wall behind your other leg.
- Lean your hip toward the wall until you feel a stretch at the outside of your hip. Hold the stretch for 30 seconds.
- Repeat on the opposite side, then repeat the entire sequence 4 times.

**Tip** Do not lean forward or twist at the waist.



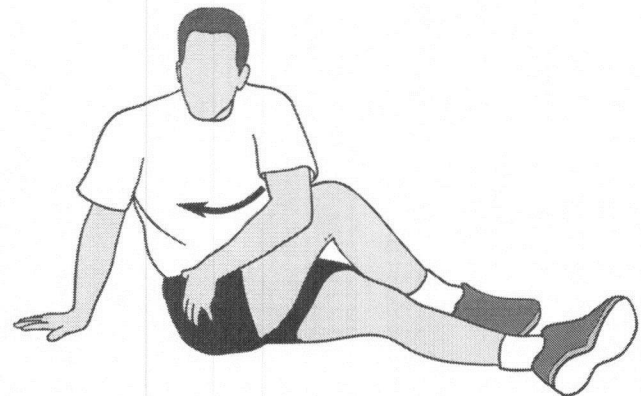
### 2. Seated Rotation Stretch

<b>Repetitions</b>	Main muscles worked: Piriformis You should feel this stretch in your buttocks, as well as at your sides
2 sets of 4	
<b>Days per week</b>	Equipment needed: None
Daily	

#### Step-by-step directions

- Sit on the floor with both legs straight in front of you. Cross one leg over the other.
- Slowly twist toward your bent leg, putting your hand behind you for support.
- Place your opposite arm on your bent thigh and use it to help you twist further.
- Look over your shoulder and hold the stretch for 30 seconds. Slowly come back to center.
- Reverse leg positions and repeat the stretch on the other side. Repeat the entire sequence 4 times.

**Tip** Keep your sit bones pressed into the floor throughout the stretch.

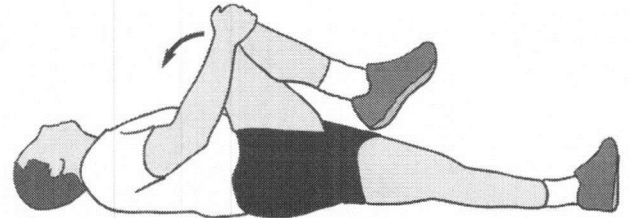




## Hip Conditioning Program STRETCHING EXERCISES

### 3. Knee to Chest

<b>Repetitions</b>	<b>Main muscles worked:</b> Gluteus maximus, gluteus medius You should feel this stretch in your buttocks
2 sets of 4	
<b>Days per week</b>	<b>Equipment needed:</b> None
Daily	



#### Step-by-step directions

- Lie on your back on the floor with your legs extended straight out.
- Bend one knee and grasp your shinbone with your hands.
- Gently pull your knee toward your chest as far as it will go.
- Hold the stretch for 30 seconds and then relax for 30 seconds.
- Repeat on the other side, then pull both legs in together. Repeat the entire sequence 4 times.

**Tip** Keep your lower back pressed into the floor.

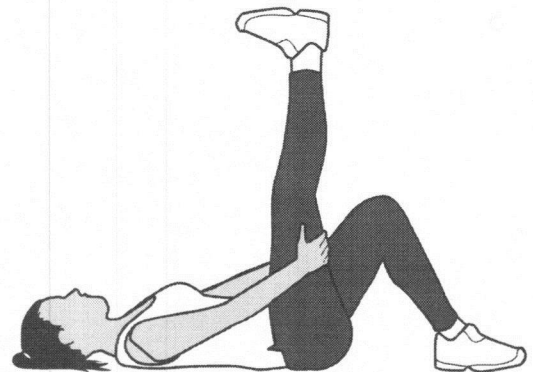
### 4. Supine Hamstring Stretch

<b>Repetitions</b>	<b>Main muscles worked:</b> Hamstrings You should feel this stretch at the back of your thigh and behind your knee
2 sets of 4	
<b>Days per week</b>	<b>Equipment needed:</b> None
Daily	

#### Step-by-step directions

- Lie on the floor with both knees bent.
- Lift one leg off of the floor and bring the knee toward your chest. Clasp your hands behind your thigh below your knee.
- Straighten your leg and then pull it gently toward your head until you feel a stretch. (If you have difficulty clasping your hands behind your leg, loop a towel around your thigh. Grasp the ends of the towel and pull your leg toward you.)
- Hold for 30 to 60 seconds and then relax for 30 seconds.
- Repeat on the other side, then repeat the entire sequence 4 times.

**Tip** Do not pull at your knee joint.





## Hip Conditioning Program **STRENGTHENING EXERCISES**

### 5. Hip Abduction

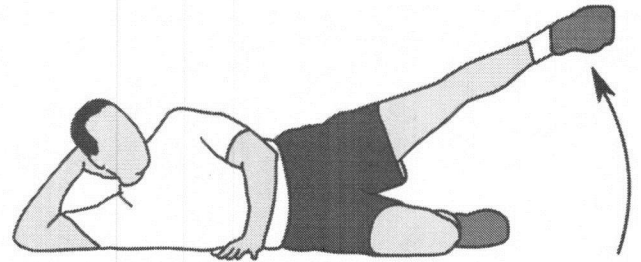
<b>Repetitions</b>
8
<b>Days per week</b>
2 to 3

**Main muscles worked:** Gluteus medius, abductors  
You should feel this exercise at your outer thigh and buttocks

**Equipment needed:** Begin with a weight that allows 8 repetitions and progress to 12 repetitions. As the exercise becomes easier, add weight in 1-pound increments. Each time you increase the weight, start again at 8 repetitions, working back up to 12.

#### Step-by-step directions

- Lie on your side with your injured leg on top and the bottom leg bent to provide support.
- Straighten your top leg and slowly raise it to 45°. Keep your knee straight, but not locked.
- Hold this position for 5 seconds.
- Slowly lower your leg and relax it for 2 seconds.







## Hip Conditioning Program **STRENGTHENING** **EXERCISES**

- Repeat, then complete exercise on the other side.

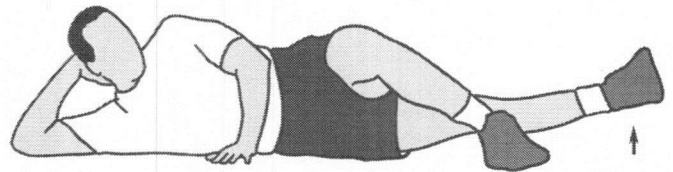
**Tip** Do not turn your leg in an effort to raise it higher. The outside of your thigh should be lifted toward the ceiling.

### 6. Hip Adduction

<b>Repetitions</b>	<b>Main muscles worked:</b> Adductors You should feel this exercise at your inner thigh
8	
<b>Days per week</b>	<b>Equipment needed:</b> Begin with a weight that allows 8 repetitions and progress to 12 repetitions. As the exercise becomes easier, add weight in 1-pound increments. Each time you increase the weight, start again at 8 repetitions, working back up to 12.
2 to 3	

#### Step-by-step directions

- Lie on the side of your injured leg with both legs straight.
- Bend your top leg and cross it over your injured leg.
- Raise your injured leg 6" to 8" off of the floor.
- Hold this position for 5 seconds.
- Slowly lower your leg and rest for 2 seconds.
- Repeat, then complete exercise on the other side.

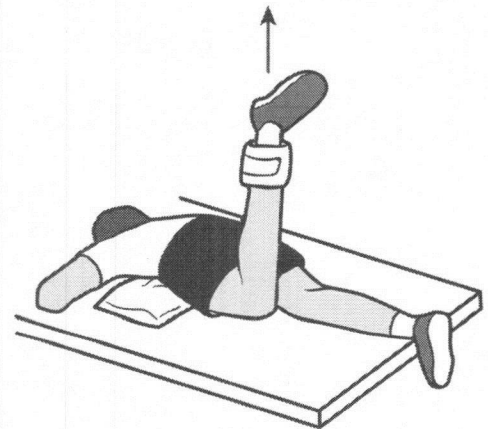


### 7. Hip Extension (Prone)

<b>Repetitions</b>	<b>Main muscles worked:</b> Gluteus maximus You should feel this exercise in your buttocks
8	
<b>Days per week</b>	<b>Equipment needed:</b> Begin with a weight that allows 8 repetitions and progress to 12 repetitions. As the exercise becomes easier, add weight in 1-pound increments. Each time you increase the weight, start again at 8 repetitions, working back up to 12.
2 to 3	

#### Step-by-step directions

- Lie on your stomach on a firm, flat surface with a pillow under your hips.
- Bend one knee 90°.
- Lift your leg straight up as shown.
- Slowly lower your leg down to the floor, counting to 5.



**Tip** Keep your head, neck, and upper body relaxed during this exercise.

**Tip** Place your hand on the floor in front of your abdomen to prevent you from leaning backward.



## Hip Conditioning Program **STRENGTHENING** **EXERCISES**

- Repeat, then complete exercise on the other side.

### 8. *Internal Hip Rotation*

Repetitions
8

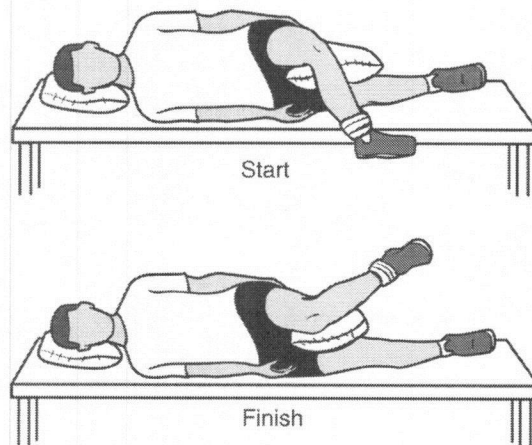
**Main muscles worked:** Medial hamstrings  
You should feel this exercise at the back of your thigh

Days per week
2 to 3

**Equipment needed:** Begin with a weight that allows 8 repetitions and progress to 12 repetitions. As the exercise becomes easier, add weight in 1-pound increments. Each time you increase the weight, start again at 8 repetitions, working back up to 12.

#### Step-by-step directions

- Lie on your side on a table or physical therapy bench with a pillow between your thighs. Place your lower arm in front of your body and use a pillow under your head for comfort, if needed.
- Bring your top leg forward and lower your foot so that it is below the tabletop, as shown in the “start” position. Your bottom leg can be slightly bent for balance.
- Rotate your hip and lift your foot as high as possible, as shown in the “finish” position.
- Slowly lower your leg back to the “start” position, counting to 5.
- Repeat, then complete exercise on the other side.



### 9. *External Hip Rotation*

Repetitions
8

**Main muscles worked:** Piriformis  
You should feel this exercise in your buttocks

Days per week
2 to 3

**Equipment needed:** Begin with a weight that allows 8 repetitions and progress to 12 repetitions. As the exercise becomes easier, add weight in 1-pound increments. Each time you increase the weight, start again at 8 repetitions, working back up to 12.

**Tip** Stay centered on your side and do not lean your body forward or backward.

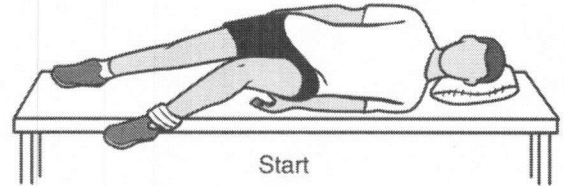
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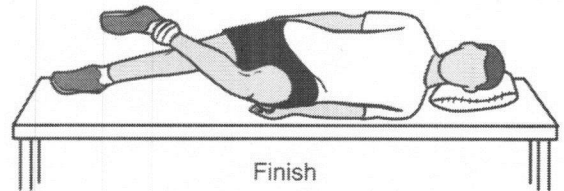
## Hip Conditioning Program STRENGTHENING EXERCISES

### Step-by-step directions

- Lie on your side on a table or physical therapy bench. Place your lower arm in front of your body and use a pillow under your head for comfort, if needed.
- Bring your bottom leg forward and lower your foot so that it is below the tabletop, as shown in the “start” position. Your top leg is mostly straight to help you balance.
- Rotate your hip and lift your foot as high as possible, as shown in the “finish” position.
- Slowly lower your leg back to the “start” position, counting to 5.
- Repeat on the other side.



Start



Finish

**Tip** Stay centered on your side and do not lean your body forward or backward.