# SNAPPING HIP SYNDROME

# Description

Snapping hip syndrome is characterized by snapping of the hip that can be heard by the athlete, and often others; this may be due to one of many causes. The two most common causes of this syndrome are due to tendons snapping over bony bumps (prominences). The iliotibial band that travels from the pelvis to the knee can snap over the greater trochanter (hip), causing irritation of the trochanteric bursa (a bursa that reduces friction between the iliotibial band and the greater trochanter). The second major cause is inflammation of the iliopsoas tendon where it attaches to the hip; in addition, the iliopsoas tendon may catch over a bony bump (iliopectineal eminence). Other causes include loose pieces of bone or cartilage within the hip joint and a hamstring tendon (biceps femoris) snapping over the ischial tuberosity (bony bump of the buttocks).

#### Common Signs and Symptoms

- Snapping of the hip, often without discomfort; felt on the outer part of the hip if the iliotibial band is the cause; felt in the groin or front of the hip if the iliopsoas muscle is the cause
- · Tenderness over the outer hip if due to iliotibial band

#### Causes

- This condition may occur without any injury or may be caused by strain from a sudden increase in amount or intensity of activity or overuse of the lower extremity.
- Repetitive motion (hip bending and straightening) may lead to inflammation of the tendon as it passes the bony prominences, leading to thickening and scarring of the tendon and increasing the snapping. It is associated with tight muscles and tendons.
- Iliotibial band inflammation may also be due to a direct blow to the outer hip.

#### Risk Increases With

- Contact or collision sports (football, hockey, and soccer)
- Inadequate protection of exposed areas during contact or collision sports
- Endurance sports (distance running, triathlon, race walking)
- Activities that require bending, lifting, or climbing
- Poor physical conditioning (strength and flexibility)
- Inadequate warm-up before practice or play
- Flat feet
- Lower extremity alignment, in which your knees point toward each other while your feet are straight ahead
- Compensation for other extremity injuries

#### Preventive Measures

- Wear appropriate protective equipment (hip pads) and ensure correct fit.
- Appropriately warm up and stretch before practice or competition.
- Allow time for adequate rest and recovery between practices and competition.
  - Maintain appropriate conditioning:
  - Hip, pelvis, and trunk strength
  - Flexibility and endurance
  - Cardiovascular fitness
- Use proper technique.
- Those with flat feet should wear arch supports (orthotics).

#### 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 when 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 activities that caused the symptoms. 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 (arch support) may be prescribed for those with flat feet. An injection of cortisone to the area where the tendon inserts into bone may be helpful for iliotibial band inflammation. Surgery to remove the inflamed tendon lining or degenerated tendon tissue and move the tendon is rarely needed and usually 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.

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- Pain relievers are usually not prescribed for this condition. If your physician does prescribe pain medication, use only as directed.
- Cortisone injections reduce inflammation. However, these are 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. 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)

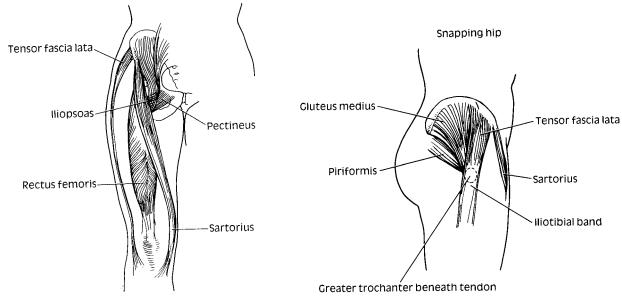


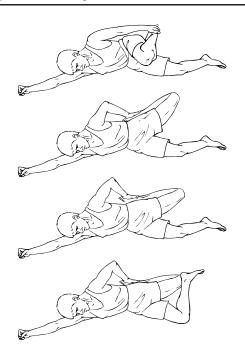
Figure 1

From Nicholas JA, Hershman EB: The Lower Extremity and Spine in Sports Medicine. St. Louis, Mosby Year Book, 1995, p. 1915; from Sammarco GJ: Clin Sports Med 2:494, 496, 1983.

#### RANGE OF MOTION AND STRETCHING EXERCISES • Snapping Hip 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.



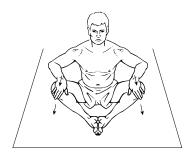
# ILIOTIBIAL BAND STRETCH

- 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.
- 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.
- 4. Bring the thigh back down and behind your body. Do not bend at the waist. Keep your heel pressed to your buttocks.
- 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.
- 6. Hold this position for \_\_\_\_\_ seconds.
- 7. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



#### 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.



# FLEXIBILITY · Hip Adductors

- 1. Sit on the floor with the soles of your feet together as shown. Keep your heels as close to your body as is comfortable.
- 2. Place your hand on top of your knees and push your legs/ knees down toward the floor.
- 3. You will feel a stretch in your groin.
- 4. Hold this position for \_\_\_\_\_ seconds.
- 5. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



# FLEXIBILITY · Hip Flexors, Lunge

- 1. Assume the position shown in the diagram.
- 2. Lunge forward, leading with your hips. Do not bend forward at the waist. Keep your chest upright.
- 3. Hold this position for <u>seconds</u>.
- 4. Repeat exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

#### STRENGTHENING EXERCISES · Snapping Hip Syndrome

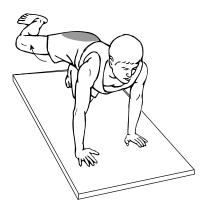
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- 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 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 Quadriped

- 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.

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Notes:

Notes and suggestions