



## Athletic Pubalgia (Sports Hernia)

Exercises:  
10 seconds  
10 times  
1 time per day

### DESCRIPTION

Athletic pubalgia is a poorly understood problem of the groin seen in athletes that may result in chronic pain and reduced performance. This injury is controversial, because there is no specific test that can confirm the diagnosis. It is felt to be an injury to the groin in which the lower abdominal (stomach) muscles join the pelvis near where a hernia may occur and where the inner thigh muscles attach; it also may include weakness of part of the groin muscles, and it may be due to inflammation where these muscles attach or to weakness of the muscles of the abdomen.

### FREQUENT SIGNS AND SYMPTOMS

- Sudden onset or may develop slowly over time
- Dull, achy pain in the groin, lower abdomen, inner thigh, and even occasionally to the testicles
- Pain when trying to do sit-ups or abdominal crunches on moving the hip, pushing the legs against each other, or kicking
- Groin pain while coughing or sneezing (sometimes)
- Pain that gets better with rest but returns when activity is restarted

### CAUSES

Athletic pubalgia is usually the result of repetitive activities in which the body is hyperextended as the thighs are brought away from each other, such as while trying to kick hard. Stiff hip joints and muscle imbalance or weakness may predispose to this injury, which may be due to a sudden, single episode of stressful activity.

### FACTORS THAT INCREASE RISK

- Sports that require repeated kicking, such as soccer and football (kickers)
- Sports that require rapid acceleration, such as ice hockey
- Male gender (almost always occurs in males)
- Poor physical conditioning (strength, flexibility)
- Previous thigh injury

### PREVENTIVE MEASURES

- Warm up and stretching before practice or competition
- Appropriate conditioning, including hip and thigh flexibility, muscle strength and endurance, and cardiovascular fitness
- Proper sports technique
- Complete rehabilitation after lower extremity injury before returning to competition or practice

### EXPECTED OUTCOME

Athletic pubalgia is occasionally curable within 6 to 12 weeks if treated appropriately with conservative treatment and resting the affected area, but it often requires surgery to return to sports.

### POSSIBLE COMPLICATIONS

- Healing time will be prolonged if the condition is not appropriately treated, or if it is not given adequate time to heal.
- Recurrence of symptoms or injury is possible if return to activity is too soon.
- If untreated, progression to a complete tear (rare) or other injury may result from favoring the injured leg.
- Prolonged disability is possible.

### GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medication and ice to relieve the pain and inflammation; stretching and strengthening exercises, including core strengthening; and modifying the activity that initially caused the problem to occur. These exercises can be carried out at home, although referral to a physical therapist or athletic trainer may be helpful. Surgery is often needed if symptoms persist despite 6 to 8 weeks of rehabilitation. Surgery may be done open or arthroscopically and usually involves modification of a standard inguinal hernia repair. Rehabilitation after surgery is generally successful at returning athletes to sports in 6 to 12 weeks.

### MEDICATION

- Nonsteroidal antiinflammatory medications, such as aspirin and ibuprofen (do not take for the first 2 to 3 days after injury, or if surgery is planned within 7 days). Other minor pain relievers, such as acetaminophen, are often recommended. Take as directed by your physician, and contact your doctor immediately if any bleeding, stomach upset, or allergic reaction occurs.
- Pain relievers may be prescribed. Use them only as directed.

### HEAT AND COLD

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. This may be done with ice packs or ice massage.

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- Heat may be used prior to performing stretching prescribed by your doctor, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

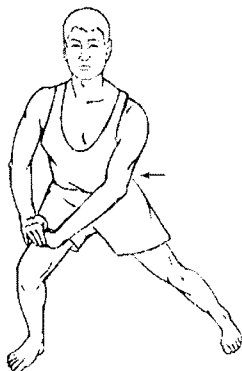
**WHEN TO CALL YOUR DOCTOR**

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

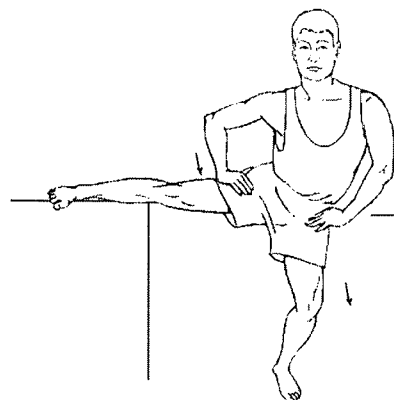
**RANGE OF MOTION AND STRETCHING EXERCISES****Athletic Pubalgia**

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

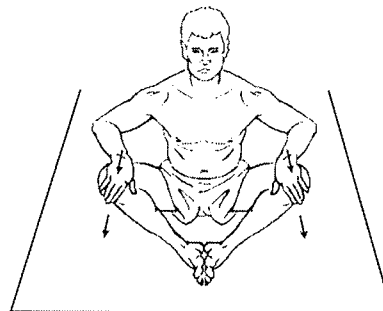
- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A *gentle* stretching sensation should be felt.

**FLEXIBILITY • Adductors, Lunge**

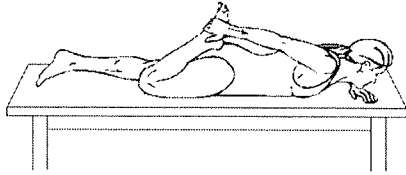
1. Spread your legs wide while standing, and assume a partial squat position.
2. Lunge and lean away from the side you want to stretch, shifting your weight toward the bent leg.
3. Hold this position for \_\_\_\_\_ seconds.
4. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

**FLEXIBILITY • Adductors, Ballet**

1. Stand and place the leg you want to stretch on a counter, chair, or other sturdy object.
2. Gradually bend the opposite knee, and gently lunge away from the leg you are stretching.
3. Hold this position for \_\_\_\_\_ seconds.
4. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

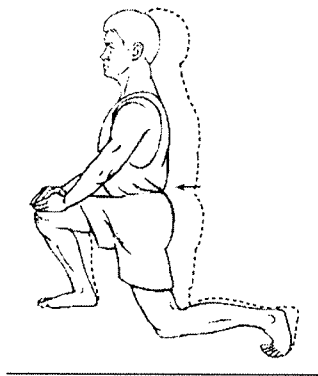
**FLEXIBILITY • Adduction**

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



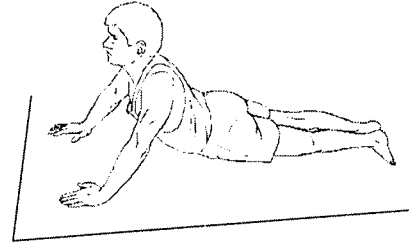
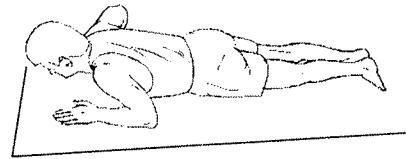
### FLEXIBILITY • Quadriceps Stretch

1. Lie on your stomach as shown.
2. Bend your knee by grasping your toes, foot, or ankle. If your body feels too tight to do this, loop a belt or towel around your ankle, and grasp that.
3. Pull your heel toward your buttock until you feel a stretching sensation in the front of your thigh.
4. Keep your knees together.
5. Hold this position for \_\_\_\_\_ seconds.
6. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



### FLEXIBILITY • Hip Flexors, Lunge

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



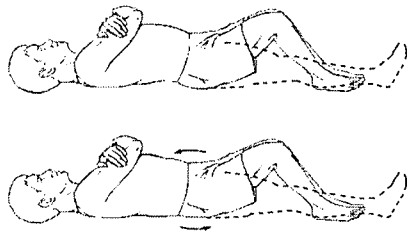
### FLEXIBILITY • Lumbar Extension

1. Lie on your stomach on the floor as shown in the picture.
2. Place your palms flat on the floor. Push down on your hands, straightening out your arms and arching your back. Straighten your elbows fully, but keep your hips on the floor.
3. Return to the starting position.
4. If you are unable to fully straighten your elbows while keeping your back relaxed, place your elbows farther out in front of you, and try again.
5. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day. Hold each repetition \_\_\_\_\_ seconds.

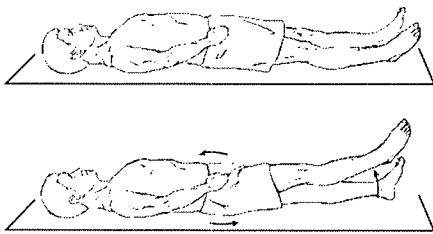
### STRENGTHENING EXERCISES Athletic Pubalgia

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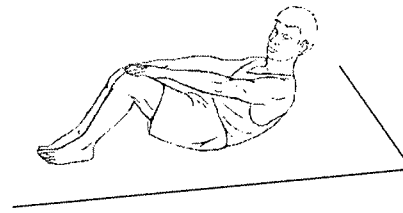
- Strong muscles with good endurance tolerate stress better.
- Do the exercises as *initially* prescribed by your physician, physical therapist, or athletic trainer. Progress slowly with each exercise under their guidance, gradually increasing the number of repetitions and weight used.

**STRENGTH • Pelvic Tilt**

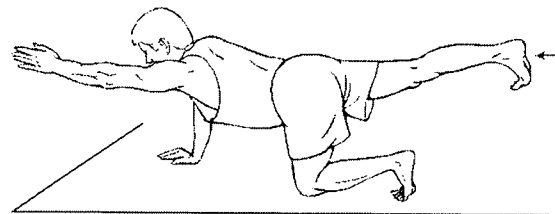
1. Lie on the floor as shown. You may do this exercise with your knees bent or straight, but it is harder with the knees straight.
2. Tighten your stomach and buttock muscles, and push back flat onto the floor. If you do this properly, your pelvis will rotate in the direction shown in the diagram. Hold each repetition \_\_\_\_\_ seconds.
3. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day. Count out loud, and *do not hold your breath*.

**STRENGTH • Pelvic Tilt with Straight Leg Raise**

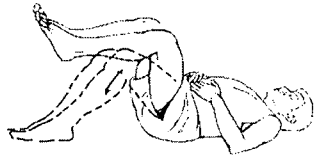
1. Lie on the floor as shown. You may do this exercise with your knees bent or straight, but it is harder with the knees straight.
2. Tighten your stomach and buttock muscles, and push back flat onto the floor. If you do this properly, your pelvis will rotate in the direction shown in the diagram.
3. Keeping your back flat on floor, slowly lift one leg off the floor 6 inches, keeping knee straight. Count out loud to 15, and *do not arch your back*.
4. Repeat with the opposite leg.
5. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

**STRENGTH • Partial Sit-ups**

1. Lie flat on your back with your hands resting on your thighs.
2. Tuck your chin to your chest.
3. Slowly sit up until you touch the top of your knees.
4. Hold this position for a count of \_\_\_\_\_, count out loud, and *do not hold your breath*.
5. Return to the starting position.
6. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

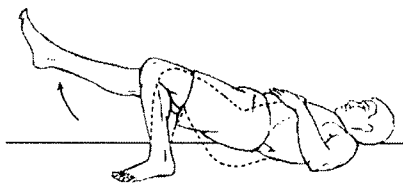
**STRENGTH • Quadruped Lift**

1. Assume a position on both hands and knees.
2. Keep your back flat and parallel to the floor. *Do not allow it to arch or move during this exercise.*
3. Lift your *left* arm up to shoulder height. Hold this position and lift your *right* leg to the same height.
4. Balance and hold this position for \_\_\_\_\_ seconds.
5. Return to the starting position, and repeat with the opposite arm and leg.
6. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day. Count out loud, and *do not hold your breath*.



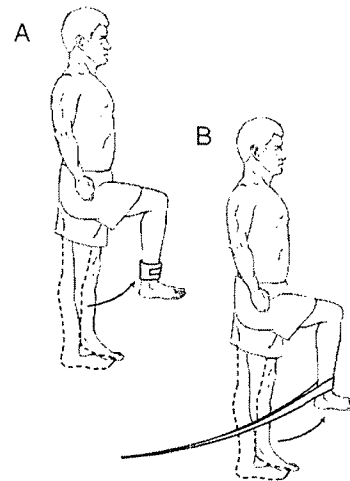
### STRENGTH • Double Leg Hold

1. Lie on your back with your hips and knees bent.
2. Bend your legs and hips toward you as shown.
3. Tighten your stomach muscles, and press your back flat into the floor.
4. Keeping your back flat on the floor, *slowly* let your legs back down. When you feel your back start to arch, stop and hold that position. Count out loud to 15, and *do not hold your breath*.
5. Return to the starting position.
6. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.



### STRENGTH • Hip Extension

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



### STRENGTH • Hip Flexion

1. Stand with an erect posture.
2. Place a \_\_\_\_\_ weight around your ankle.
3. Bend your hip and knee up, until your thigh is parallel with the floor.
4. Hold this position for \_\_\_\_\_ seconds.
5. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.
6. An advanced form of this exercise is to loop a piece of rubber band or tubing around your ankle with the other end tied around a stationary object.
7. Step forward with the opposite leg as shown.
8. Bring the affected leg forward as shown.
9. Hold this position for \_\_\_\_\_ seconds.
10. Repeat this exercise \_\_\_\_\_ times, \_\_\_\_\_ times per day.

