# PES ANSERINE (KNEE) BURSITIS

#### What is pes anserine bursitis?

Pes anserine bursitis is an irritation or inflammation of a bursa in your knee. A bursa is a fluid-filled sac that acts as a cushion between tendons, bones, and skin.

The pes anserine bursa is located on the inner side of the knee just below the knee joint. Tendons of three muscles attach to the shin bone (tibia) over this bursa. These muscles act to bend the knee, bring the knees together, and cross the legs.

Pes anserine bursitis is common in swimmers who do the breaststroke and is sometimes called breast-stroker's knee.

#### How does it occur?

Pes anserine bursitis can result from:

- overuse, as in breaststroke kicking or kicking a ball repeatedly
- repeated pivoting from a deep knee bend
- a direct blow to the area

#### What are the symptoms?

Pes anserine bursitis causes pain on the inner side of the knee, just below the joint. You may have pain when you bend or straighten your leg.

## How is it diagnosed?

Your healthcare provider examines your knee for tenderness over the pes anserine bursa.

#### How is it treated?

Treatment may include:

- using ice packs on your knee for 20 to 30 minutes every 3 to 4 hours for 2 or 3 days or until the pain goes away
- wrapping an elastic bandage around your knee to reduce any swelling or to prevent swelling from occurring
- taking anti-inflammatory medicine (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval)
- shot of a medicine like cortisone into the swollen bursa
- leg stretching and strengthening exercises

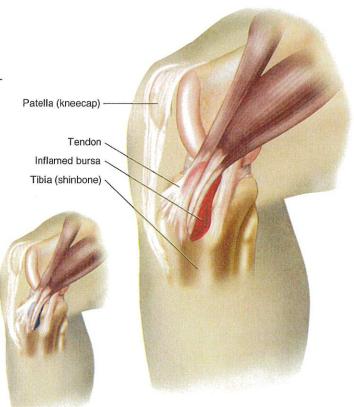
#### When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to prolonged symptoms. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your knee recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when, starting from the top of the list and progressing to the end, each of the following is true:

- Your injured knee can be fully straightened and bent without pain.
- Your knee and leg have regained normal strength compared to the uninjured knee and leg.
- Your knee bursa is not swollen or tender to touch.

### PES ANSERINE (KNEE) BURSITIS



Normal Pes Anserine Bursa

- You are able to jog straight ahead without limping.
- You are able to sprint straight ahead without limping.
- You are able to do 45-degree cuts.
- You are able to do 90-degree cuts.
- You are able to do 20-yard figure-of-eight runs.
- You are able to do 10-yard figure-of-eight runs.
- You are able to jump on both legs without pain and jump on the injured leg without pain.

• If you are a swimmer, you need to be able to do the breaststroke kick without pain.

### How can I prevent pes anserine bursitis?

Pes anserine bursitis is best prevented by a proper warm-up that includes stretching of the hamstring muscles, the inner thigh muscles, and the top thigh muscles. Gradually increasing your activity level, rather than doing everything at once, will also help prevent its development.

# PES ANSERINE (KNEE) BURSITIS REHABILITATION EXERCISES

You can stretch your leg right away by doing the first 3 exercises. Start strengthening your leg by doing the last 4 exercises.

1. HAMSTRING STRETCH ON WALL: Lie on your back with your buttocks close to a doorway, and extend your

> legs straight out in front of you along the floor. Raise one leg and rest it against the wall next to the door frame. Your other leg should extend through the doorway. You should

feel a stretch in the back of your thigh. Hold this position for 15 to 30 seconds. Repeat 3 times.



HAMSTRING STRETCH ON WALL

**OUADRICEPS** 

STRETCH

2. STANDING CALF STRETCH: Facing a wall, put your hands against the wall at about eye level. Keep one leg back with the heel on the floor, and the other leg forward. Turn your back foot slightly inward (as if you were pigeon-toed) as you slowly lean into the wall until you feel a stretch in the back of your calf. Hold for 15 to 30 seconds. Repeat 3 times. Do this exercise several times each day.



STANDING CALF

3. QUADRICEPS STRETCH: Stand an arm's length away from the wall, facing straight ahead. Brace yourself by keeping one hand against the wall. With your other hand, grasp the ankle of the opposite leg and pull your heel toward your buttocks. Don't arch or twist your back. Keep your knees together. Hold this stretch for 15 to 30 seconds. Repeat 3 times on each side.

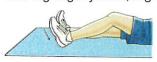
4. HIP ADDUCTOR STRETCH: Lie on your back, bend your knees, and put your feet flat on the floor. Gently spread your knees apart, stretching the muscles on the inside of your thigh. Hold this for 15 to 30 seconds.

HIP ADDUCTOR STRETCH

5. QUAD SETS: Sitting on the floor with one leg straight and your other leg bent, press the back of your knee of your straight leg into the floor by tightening the muscles on the top of your thigh. Hold this position 10 seconds. Relax.

QUAD SETS

6. ISOMETRIC KNEE FLEXION: Sitting on the floor with one leg slightly bent, dig the heel of your other leg



Repeat 3 times.

Do 3 sets of 10.

ISOMETRIC KNEE FLEXION

into the floor and tighten up the back of your thigh muscles. Hold this position for 5 seconds.

Do 3 sets of 10.

7. HEEL SLIDE: Sit on a firm surface with your legs straight in front of you. Slowly slide the heel of one leg toward your buttock by pulling your knee to your chest as you slide. Return to the starting position. Do 3 sets of 10. HEEL SLIDE