Located throughout the body are small, jelly-like sacs known as bursae. These sacs are around the shoulder, elbow, hip, knee and heel. Bursae act as a cushion to help reduce friction that is positioned between bones and soft tissues.

An inflammation of the bursa located between the tibia (shinbone) and three tendons of the hamstring muscles at the inside of the knee is known as pes anserine bursitis. An inflammation occurs when the bursa becomes irritated and produces too much fluid as a response, which causes it to swell and put pressure on the tendons.

An athlete typically will experience pain and tenderness 2 to 3 inches below the knee joint.

**Causes**
The result of overuse or constant friction and stress on the bursa usually results in bursitis. Pes anserine bursitis is particularly common in runners and athletes. Several factors can contribute to the development of knee tendon bursitis, including:
- Incorrect training techniques, such as neglecting to stretch, excessive hill running, and sudden increases in mileage
- Tight hamstring muscles
- Obesity
- An out-turning of the knee or lower leg
- Osteoarthritis in the knee

### Symptoms
The symptoms of pes anserine bursitis include:
- Pain slowly developing on the inside of your knee and/or in the center of the tibia
- Increased pain with exercise or climbing stairs

### Examination
The physician will examine your knee and talk to you about your symptoms. The symptoms may mimic those of other problems, so an x-ray may be needed.

### Treatment Options
Athletes with pes anserine bursitis should take steps to modify their workout program so that the inflammation does not recur. Other treatments include: Rest, Ice, Anti-inflammatory medication, Injection, Physical Therapy, or a patella strap.

**Rest**
Discontinue the activity or substitute a different activity until the bursitis clears up or becomes tolerable.

**Medication**
Taking anti-inflammatory medicine or NSAIDS (non-steroidal anti-inflammatory drugs) such as Motrin, Advil, Naproxen or Aleve as directed by your doctor can be effective. This medication should be taken for 10 to 14 days to allow the medicine to build to therapeutic levels in the body. Taking the medication infrequently allows the medicine levels to drop, which decreases effectiveness.

**Icing**
- Ice packs or ice massage can be applied to the knee for 15-20 minutes. This can be repeated every 60-90 minutes, several times a day. You should ice after exercise and on off days.
- Ice massage is performed by filling several paper cups with water and placing them in a freezer. When frozen, the cup’s rim is torn off to create an ice cone. The ice is then directly applied to the sore area until the area becomes numb.

**Physical Therapy**
Physical Therapy may be recommended for specific stretching exercises, ice and ultrasound treatments.

**Patella Strap**
A knee strap may be ordered by the doctor to help take tension off of the hamstring tendon and decrease symptoms.
Do you have Pes Anserine Bursitis?

The doctor diagnoses pes anserine bursitis based on your symptoms, clinical examination, and x-rays. X-rays may be ordered by your doctor to confirm the diagnosis or to rule out other problems.

Injection
The physician may inject a solution of anesthetic and steroid into the bursa. Often times this will provide prompt relief.

Can Pes Anserine Bursitis be prevented?
No. There is not a 100% guaranteed method to prevent an active athlete from developing pes anserine bursitis.

It may be a recurring problem for some, but the majority of cases can be managed by using the treatment measures described and athletic participation does not need to be significantly limited.