Pes anserine Bursitis / Tendinopathy

What is it?
Pes anserine bursitis / tendinopathy refers to irritation within the tendons and bursa which attach to the inside of the lower leg just below the knee joint.

How did I get it?
Pes anserine bursitis / tendinopathy results from overuse of the tendons which attach just below the inner surface of the knee. The function of these tendons is to transmit forces produced by three inner thigh muscles to the shin bone to control movement of the knee joint. Repetitive use of these muscles and, therefore, their tendons can lead to irritation of the tendons and bursa. The tendons often begin to breakdown and the bursa sometimes becomes inflamed.

What are the symptoms?
Pes anserine bursitis / tendinopathy results in pain felt on the inner aspect of the leg just below the knee joint, which typically develops gradually (initially the tendons may only be painful following exercise). This initial sign of pes anserine bursitis / tendinopathy is often ignored, as it disappears quickly with walking about or applying heat i.e. a hot shower over the inside of the knee. However, as you continue to exercise, the tendinopathy progresses and the pain within the tendon becomes more intense and more frequent. In the earlier stages, this pain during exercise may initially disappear as you warm up, only to return when you cool down. However, as you continue to exercise, the tendinopathy worsens and your pain may begin to be present for longer periods during exercise until it is present all the time. This may interfere with your performance and can sometimes become debilitating.

What should I do?
Pes anserine bursitis / tendinopathy generally does not get better on its own if the cause is not addressed and you continue to exercise. If you have or suspect you have pes anserine tendinopathy, you should consult your nearest sports medicine professional. In the meantime, you can begin initial treatment. This should consist of icing following exercise. Icing should consist of crushed ice wrapped in a moist towel applied just below the inside of the knee for 15—20 minutes or ice in a paper cup massaged over the region just below the inside of the knee until the skin is numb. You should continue to do this every 1 to 2 hours.

If you have or suspect you have pes anserine bursitis / tendinopathy, you shouldn't ignore the problem. Your pain may get better as you exercise; however, the exercise you are doing may be interfering with the healing process and causing further damage. This can lead to your injury getting worse and your pain remaining after “warm up” and throughout your exercise. If this occurs, your recovery may be prolonged and it may take a number of weeks for you to return to exercise and sport pain free.

Pes anserine bursitis / tendinopathy does not produce any long-term effects, as long as it is properly diagnosed and treated. If not, it can lead to prolonged pain in the region just below the inside of the knee and a prolonged layoff from exercise and sport.
How is a diagnosis made?
A diagnosis is made on the history of the injury and examination findings. Occasionally x-rays, ultrasound and or an MRI are ordered to rule out other injuries.

What does rehab involve?
Physical / exercise based therapy must always be the mainstay of treatment. Leg strength, flexibility and function must be preserved. While in severe cases, medications can be useful, they can generally be avoided most of the time.

Initial activity modification is an important first step. If there is an activity that is provoking symptoms it should be ceased while an appropriate retraining program for the musculature takes place. Often deep squats are provocative. Avoiding these in the short term may be worthwhile. Cross training can be performed if required.

Exercise therapy with a physiotherapist is quite important. A stretching and strengthening program will most likely be highly effective.

Activity Modification:
Reducing provocative activities such as running and jumping will facilitate recovery.

Pain Medication:
Pain medication tends not to be particularly effective for pes anserine tendinopathy / bursitis. A trial of anti-inflammatories or simple pain relief medication like paracetamol may however be worthwhile initially or if the symptoms are severe.

Physical therapy:
Exercise therapy should be the mainstay of treatment.

Cortisone injection:
An injection of cortisone, which is an anti-inflammatory steroid medication, may be given to relieve pain. Relief from a cortisone injection is usually highly effective but temporary. It may last as long as many months but as little as a few weeks. There is some contention regarding how many times an injection can be repeated but generally it will be considered twice before pursuing surgical options. The injection can be painful and has an extremely small risk of causing infection. One theoretical side effect of a cortisone injection is that it can weaken the tissue. While some areas like achilles need to be avoided, the pes anserine bursa is considered an extremely safe area to inject and so the risk is very low.

A cortisone injection is usually used in two groups of patients. The first group have milder symptoms or can alternate their duties so they can work around the pain. In this group an injection is performed when the pain has been present for a long period of time and an extensive trial of physical therapy has failed. The second group is patients with extreme symptoms or who for some reason cannot wait for physical therapy to become effective. This group usually receives an earlier injection but must also engage in physical therapy or the pain will just return when the injection wears off.