

PES ANSERINUS SYNDROME

DESCRIPTION

The pes anserinus is the tendon insertion of 3 muscles of the thigh into the upper leg (tibia), just below the knee to the inner side of the front of the leg. Where the tendon attaches to bone, there is a bursa sac between the bone and the tendon. The bursa functions like a water balloon to reduce friction and wear of the tendon against the bone. With this syndrome there is inflammation and pain of the bursa (bursitis), tendon (tendinitis), or both.

FREQUENT SIGNS AND SYMPTOMS

- Pain, tenderness, swelling, warmth and/or redness over the pes anserinus bursa and tendon on the front inner leg just 2-3 inches below the knee. The pain is usually slight when beginning to exercise and is worse as the activity continues.
- Pain with running or bending the knee against resistance
- Crepitation (a crackling sound) when the tendon or bursa is moved or touched

CAUSES

- Strain from sudden increase in amount or intensity of activity or overuse of the lower extremity usually in the endurance athlete or the athlete just beginning to run.
- May also be due to direct trauma to the upper leg.

RISK INCREASES WITH

- Endurance sports (distance runs, triathlons)
- Beginning a training program
- Sports that require pivoting, cutting (sudden change of direction while running), jumping and deceleration.
- Incorrect training techniques that include excessive hill running, recent large increases in mileage, inadequate time for rest between workouts..
- Poor physical conditioning (strength/flexibility)
- Inadequate warm-up prior to practice or play
- Knock knees
- Arthritis of the knee.

PREVENTIVE MEASURES

- Appropriate warm up and stretching before practice or competition
- Give time for adequate rest and recovery between practices and competition
- Appropriate conditioning including cardiovascular fitness, knee and thigh flexibility (especially hamstrings muscles), muscle strength and endurance
- Proper training technique, including reducing mileage run, shorten stride length
- Arch supports (orthotics) for those with flat feet.

EXPECTED OUTCOME

Usually curable within 6 weeks if treated appropriately with conservative treatment and resting the affected area.

POSSIBLE COMPLICATIONS

- Healing time will be prolonged if not appropriately treated or if not given adequate time to heal
- Chronically inflamed tendon and bursa causing persist pain with activity that may progress to constant pain
- Recurrence of symptoms if return to activity is too soon, with overuse, direct blow, or poor technique.

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medication and ice to relieve the pain, stretching and strengthening exercises (particularly the hamstring muscles) and modifying the activity which initially cause the problem to occur. These all can be carried out at home, though referral to a physical therapist or athletic trainer for further evaluation and treatment may be helpful. An orthotic (arch support) for those with flat feet may be prescribed to reduce stress to the tendon. A knee sleeve or bandage may help keep the tendon and bursa warm during activity and reduce some of the symptoms. An injection of cortisone into the bursa may be recommended. Surgery to remove the inflamed bursa is usually only considered after at least 6 months of conservative treatment or when the condition recurs many times and the bursa is very large.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Pain relievers are usually not prescribed for this condition. If your physician does prescribed pain medications, use only as directed.
- Cortisone injections reduce inflammation, and anesthetics temporarily relieve pain. However, this is done only in extreme cases as there is a limit to the number of times cortisone may be given due to the fact it weakens muscle and tendon tissue.

HEAT AND COLD:

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 - 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use 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.