

SEMIMEMBRANOSUS TENDINITIS

DESCRIPTION

Inflammation and pain at the knee joint on the back part of the inner side of the knee at the semimembranosus tendon. The semimembranosus tendon is the tendon attachment of one of the hamstring muscles from the hip to the leg. This structure is important for straightening your hip and bending your knee. It is also important for running and jumping. This may occur by itself or with other knee disorders. This is usually a grade 1 or 2 strain of the tendon. A *Grade 1 strain* is a mild strain. There is a “slight pull” without obvious tearing (it is microscopic tendon tearing). There is no loss of strength and the tendon length is normal. A *Grade 2 strain* is a moderate strain. There is tearing of fibers within the substance of the tendon or at the bone-tendon junction. The length of the muscle-tendon-bone unit is increased and there is usually decreased strength. A *grade 3 strain* is a complete rupture of the tendon. (see Hamstring Rupture).

FREQUENT SIGNS AND SYMPTOMS

- Pain, tenderness, swelling, warmth and/or redness over the semimembranosus tendon at the inner knee toward the back of the knee. The pain is worse during and after strenuous activity.
- Pain with running or bending the knee against resistance
- Crepitation (a crackling sound) when the tendon is moved or touched

CAUSES

Strain from sudden increase in amount or intensity of activity or overuse of the lower extremity usually in the middle-aged endurance athlete. It may also be due to compensation of other knee injuries, such as cartilage tears.

RISK INCREASES WITH

- Endurance sports (distance runs, triathlons, race walk) or activities that require bending, lifting or climbing.
- Training that requires running down hills.
- Poor physical conditioning (strength/flexibility)
- Inadequate warm-up prior to practice or play
- Flat feet or alignment of the lower extremity where your knees point toward each other while your feet are straight ahead.

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 ankle and leg flexibility, muscle strength and endurance as well as cardiovascular fitness
- Proper technique.
- 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 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 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 warm during activity and reduce some of the symptoms. An injection of cortisone to the area of tendon insertion into bone may be recommended. Surgery to remove the inflamed tendon lining or degenerated tendon tissue and move the tendon is rarely necessary and usually only considered after at least 6 months of conservative treatment. Surgery to correct other knee problems that may be contributing to this tendinitis may be recommended prior to surgery for the tendinitis itself.

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. Contact your physician immediately if any bleeding, stomach upset or allergic reaction occurs.
- Pain relievers are usually not prescribed for this condition. If your physician does prescribe pain medication, 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. 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 prescribed stretching and strengthening activities. 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