SAPHENOUS NERVE ENTRAPMENT

Description

Saphenous nerve entrapment is a nerve disorder in the thigh causing pain and loss of feeling, often in the knee (inner side) and the inner upper leg and occasionally in the inner foot. It involves compression of the saphenous nerve at the inner part of the lower thigh by ligament-like tissues (fascia) or other structures as it goes from deep in the thigh toward the skin.

Common Signs and Symptoms

- Tingling, numbness, or burning in the inner knee, the inner leg, and occasionally the inner foot
- Pain and discomfort in the inner knee, with a feeling of burning, fatigue, or heaviness
- Usually, pain with sports activities such as running, jumping, or long walks; often felt at night
- Tenderness at the inner thigh several inches above the knee

Causes

- Pressure on the saphenous nerve at the lower thigh by ligament-like tissue that covers and pinches the nerve as the nerve travels from deep in the thigh toward the skin

Risk Increases With

- Contact sports in which direct injury to the nerve may occur
- Sports involving running, jumping, or prolonged walking
- Direct pressure on the nerve, such as with poorly fitting thigh pads
- Poor physical conditioning (strength and flexibility)
- Excessive strength of the thigh muscles

Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
  - Thigh and knee flexibility
  - Muscle strength and endurance
  - Cardiovascular fitness
- Wear proper protective equipment.

Expected Outcome

This condition is usually curable with appropriate treatment, and sometimes it heals spontaneously. Occasionally, surgery is necessary.

Possible Complications

- Permanent numbness in the affected knee, leg, and foot
- Persistent pain in the knee, leg, and foot

General Treatment Considerations

Initial treatment consists of rest from the offending activity and medications and ice to help reduce pain and inflammation. Stretching and strengthening exercises of the muscles of the thigh may be useful. Injections of cortisone and numbing medicine to the area where the nerve is being pinched can help reduce the nerve pinching and inflammation. Chronic cases often require referral to physical therapy or an athletic trainer. If this treatment is not successful, surgery may be necessary to free the pinched nerve by cutting the fascia where the nerve is being pinched. Surgery may be performed on an outpatient basis (you go home the same day) to remove the source of compression. This provides almost complete relief in most patients.

Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.

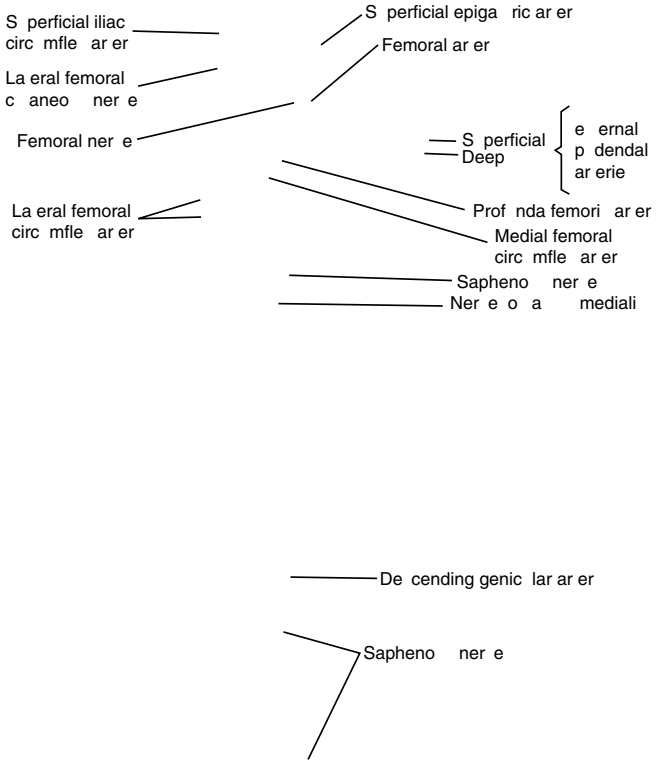


Figure 1

From Jenkins DB: Hollinshead's Functional Anatomy of the Limbs and Back, 6th ed. Philadelphia, WB Saunders, 1991, p. 246.

- Pain relievers may be prescribed as necessary by your physician, usually only after surgery. Use only as directed and only as much as you need.
- Injections of corticosteroids may be given to reduce inflammation, although not usually for acute injuries.

Heat and Cold

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used before 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)

EXERCISES

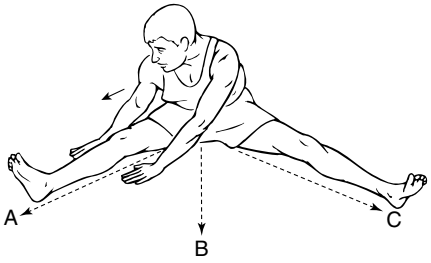
➢ **RANGE OF MOTION AND STRETCHING EXERCISES** • Sapheno Ner e En rapmen

These are some of the ***initial*** exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A ***gentle*** stretching sensation should be felt.

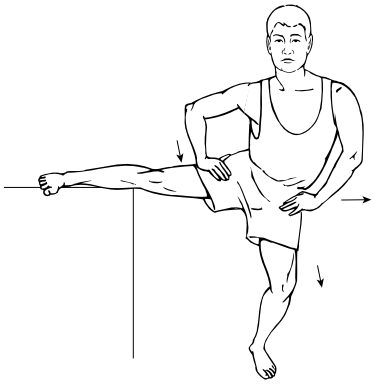
FLEXIBILITY Add c or , L nge

1. Spread your legs wide while standing. Then assume a partial "squat" position.
2. "Lunge/Lean" away from the side you want to stretch, shifting your weight toward the bent leg.
3. Hold this position for _____ seconds.
4. Repeat exercise _____ times, _____ times per day.



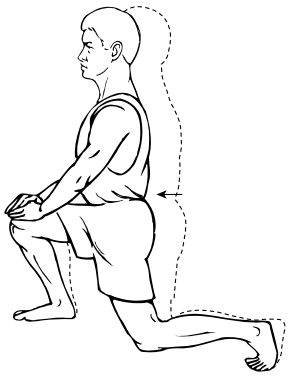
FLEXIBILITY Ham ring /Add c or , V-Si

1. Sit on the floor with your legs spread as wide as possible in front of you. Your knees must be straight.
2. Lean over one leg with both hands. Keep your chest upright and reach for your toes. (Position A)
3. Hold this position for _____ seconds. Relax and return to your starting position.
4. Now reach forward between your legs. (Position B)
5. Repeat for Position C.
6. Repeat exercise _____ times, _____ times per day.



FLEXIBILITY Add c or , Balle

1. Stand and place the leg you want to stretch on a counter, chair, or other sturdy object.
2. Gradually bend the opposite knee and gently lunge away from the leg you are stretching.
3. Hold this position for _____ seconds.
4. Repeat exercise _____ times, _____ times per day.



FLEXIBILITY Hip Fle or , L nge

1. Assume the position shown in the diagram.
2. Lunge forward, leading with your hips. Do not bend forward at the waist. Keep your chest upright.
3. Hold this position for _____ seconds.
4. Repeat exercise _____ times, _____ times per day.

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Notes and suggestions