

# ***MEDIAL HEAD GASTROCNEMIUS TEAR*** **(TENNIS LEG)**

## **DESCRIPTION**

A strain of the inner part (medial head) of the major calf muscle (gastrocnemius muscle). Muscle attaches to bone via tendon. The injury occurs at this junction between the muscle and tendon. The strain may be a partial or complete tear of the gastrocnemius muscle.

## **FREQUENT SIGNS AND SYMPTOMS**

- Sudden pop or crack in the calf at the time of injury, feeling like being kicked or hit sharply in the calf or shot in the calf.
- Pain, tenderness, swelling, warmth and/or redness over the middle, inner calf.
- Pain and weakness with ankle motion (especially flexing the ankle against resistance such as with pushing off, pushing down with the front of the foot, or standing on the ball of the foot) as well as pain with lifting the foot up (extending the ankle).
- Bruising in the calf, heel and occasionally foot 48 or more hours following the injury
- Muscle spasm in the calf

## **CAUSES**

- Strain from sudden increase in amount or intensity of activity or overuse of the lower leg muscles
- Direct blow or injury to the calf.
- Sudden forceful pushing off of the foot such as with jumping, landing, serving a tennis ball or lunging.

## **RISK INCREASES WITH**

- Sports that require sudden, explosive calf muscle contraction, such as those involving jumping (basketball), hill running, quick starts (running), or lunging (racquetball or tennis).
- Contact sports, such as football, soccer or hockey.
- Poor physical conditioning (strength/flexibility)
- Previous lower extremity injury

## **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 sports technique
- Complete rehabilitation after lower extremity injury before returning to competition or practice.

## **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
- Recurrence of symptoms and injury if return to activity is too soon, with overuse, direct blow, or poor technique.
- Untreated the strain may progress to a complete tear (rare) or other injury due to limping and favoring the injured leg.
- Persistent limping due to scarring and shortening of the calf muscles due to inadequate rehabilitation.
- Prolonged disability

## **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. Occasionally, a splint, cast, or walking boot may be recommended to 10 to 21 days to immobilize the tendon to allow the inflammation to settle down. Sometimes crutches are necessary for the first 24 to 72 hours. For less severe cases or after immobilization, a heel lift may be prescribed to reduce stress to the muscle. Surgery is rarely necessary. Suturing or sewing torn muscle is usually not successful.

## **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 may be prescribed as necessary by your physician. Use only as directed.

## **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 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
- Numbness or tingling develop.
- New, unexplained symptoms develop. Drugs used in treatment may produce side-effects.