

ANKLE SPRAIN, CHRONIC

DESCRIPTION

The ankle that is chronically unstable may be described as being functionally unstable or mechanically unstable.

- A *functionally unstable* ankle is where an ankle gives way. This may or may not be associated with looseness of the ankle.
- A *mechanically unstable* ankle is where the ankle is loose due to the ligament not healing or healing in a stretched position. Not all loose ankles are unstable or give way.

FREQUENT SIGNS AND SYMPTOMS

- Recurrent ankle pain and giving way of the ankle
- Difficulty running on uneven surfaces, jumping or cutting (changing directions while running)
- Pain, tenderness, swelling and bruising at the site of injury
- Weakness and/or looseness in the ankle joint
- Occasionally impaired ability to walk soon after injury

CAUSES

- The most frequent cause of functional instability is incomplete or no rehabilitation of a previous ankle sprain
- Stress imposed from either side of the ankle joint that temporarily forces or pries the ankle bone (talus) out of its normal socket. The ligaments that normally hold the joint in place are stretched and torn.

RISK INCREASES WITH

- Loose ankle due to previous severe ankle sprain or someone who is born with joint looseness
- Too rapid return to activity after previous ankle sprain
- Activities in which the foot may land sideways while running, walking, and jumping (such as basketball, volleyball, and soccer) or walking or running on uneven or rough surfaces.
- Inadequate ankle support with strapping, taping, bracing or shoes prior to participation in contact sports
- Poor physical conditioning (strength/flexibility)
- Poor balance skills

PREVENTIVE MEASURES

- Appropriate warm up and stretching before practice or competition
- Appropriate conditioning:
 - Ankle/leg flexibility, muscle strength & endurance
 - Balance training activities
- Proper technique / coaching
- Taping, protective strapping, bracing and/or high top tennis shoes may be. Initially, tape is best, however, it loses most of its support function within 10-15 minutes.
- Proper protective shoes (high top shoes with taping or bracing is more effective than either alone)
- Provide the ankle with support during sports and practice activities for 12 months following injury.
- Complete rehabilitation after initial injury.

EXPECTED OUTCOME

- Most athletes regain full functional stability and ability to return to full activity with a rehabilitation program, though occasionally, surgery is necessary to restore mechanical stability (reduce the looseness) to the ankle

POSSIBLE COMPLICATIONS

- Frequent recurrence of symptoms. Appropriately addressing the problem with rehabilitation decreases the frequency of recurrence and optimizes healing time.
- Injury to other structures (bone, cartilage or tendon), and chronically unstable or arthritic ankle joint with repeated sprains.
- Complications of surgery including infection, bleeding, injury to nerves, continued giving way, ankle stiffness, ankle weakness

GENERAL TREATMENT CONDITIONS

Initial treatment consists of medication and ice to relieve the pain, compressive elastic bandage and elevation to help in reduce swelling and discomfort. A walking cast, walking boot or brace may be recommended to provide support to the joint while trying to walk with crutches for varying lengths of time depending on severity of injury. Strengthening of the muscles around the ankle is introduced as soon as symptoms permit. Retraining of balance skills is usually recommended as a way to reduce recurrent symptoms. Referral to a physical therapist or athletic trainer for further evaluation and treatment. A heel wedge to put in your shoe and/or taping or bracing of the ankle along with wearing high top shoes may also be recommended. If symptoms persist after 3 months of rehabilitation, surgery may be recommended.

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.

MEDICATION

- There are no specific medications to improve the stability of your ankle.
- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen, 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 an allergic reaction occurs.
- Topical ointments may be of benefit.

NOTIFY OUR OFFICE IF

- Pain, swelling, or bruising worsens despite treatment
- You experience locking or catching in the ankle.
- You experience pain, numbness, or coldness in the foot.
- Giving way persists after 3 - 6 months of rehabilitation