

ORTHOARIZONA

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Ankle Sprain Non-Operative Protocol

Ankle sprains are one of the most common injuries to occur in the foot and ankle region. Of all ankle sprains, approximately 85% are inversion sprains, and they are usually graded based on severity of ligament damage.

A **Grade I** sprain is a stretching of the anterior talofibular ligament (ATFL) and usually involves mild pain with minimal swelling and loss of function. Crutches are used only as needed, and no bracing is indicated.

A **Grade II** sprain is a complete tear of the ATFL and partial tear of the calcaneofibular ligament (CFL) and usually involves moderate pain, swelling and loss of function. Crutches are used until gait is normalized, and braces are used on an individual basis for comfort and support.

A **Grade III** sprain is a complete tear of the ATFL and CFL and often involves the posterior talofibular ligament. These patients usually present with moderate to severe pain, swelling and loss of function. A brace or walking boot is used for the first 4 – 6 weeks, and crutches are used during this time unless a walking boot is utilized.

A **Grade IV** sprain, or “high ankle” sprain, usually results from a forced dorsiflexion or external rotation mechanism. Damage usually occurs to the anterior (and sometimes posterior) tibiofibular ligament and interosseous membrane. These patients usually present with moderate to severe pain and loss of function, but only mild to moderate swelling. A brace or walking boot is used for the first 4 – 6 weeks, and crutches are used during this time unless a walking boot is utilized.

Ankle Sprain Classifications

Approximate Time to Return to Full Activity

Grade I.....	1 – 2 Weeks
Grade II.....	2 – 4 Weeks
Grade III.....	8 – 10 Weeks
Grade IV.....	12 – 16 Weeks

Rehabilitation Program

Early Phase

- Control pain and swelling
- Brace and crutches as needed for protection and comfort
 1. Modalities as indicated for pain and edema control.
 2. ROM to tolerance (Avoid extreme inversion for 3 – 4 weeks with Grade II sprains and for 6 - 8 weeks with Grade III sprains. Avoid extreme dorsiflexion and eversion for 6 – 8 weeks with Grade IV sprains).
 3. Theraband strengthening within pain-free ROM.
 4. Static balance training as weight bearing status improves.
 5. Bicycle for ROM and cardiovascular training as tolerated.
 6. Wean from crutches as gait normalizes.

Intermediate Phase

- Normalize gait
- Restore full ROM and flexibility
- Increase muscular strength and endurance
- Discontinue brace and crutches as symptoms and joint stability allow
 1. Begin higher level static balance training (foam roll, BAPS, etc.).
 2. Progress to dynamic balance training.
 3. Begin weight bearing strengthening and stretching.
 4. Progress lower extremity endurance and cardiovascular training as symptoms allow (bike sprints, interval running program, etc.).

Late Phase

- Maintain full ROM
- Restore full muscular strength and endurance
- Perform functional testing as appropriate
- Return to sports and/or work as determined by MD
 1. Begin plyometric training.
 2. Begin agility's.
 3. Begin sport- and/or work-specific activities.