

Non-Operative Ankle Sprain Treatment Protocol

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Purpose & Philosophy

Ankle sprains are among the most common sports injuries and are frequently undertreated. Non-operative management focuses on early protection, restoration of motion, progressive loading, and proprioceptive retraining to prevent chronic ankle instability.

Appropriate Candidates

Grade I–II ankle sprains and many Grade III injuries without fracture, syndesmotic instability, or gross mechanical instability. Imaging is used selectively when indicated.

Phase 1: Acute Protection & Symptom Control (Weeks 0–2)

Goals include pain control, swelling reduction, and protection of injured ligaments. Functional immobilization with a brace or boot may be used based on severity. Early weight-bearing as tolerated is encouraged. Range of motion exercises focusing on dorsiflexion and plantarflexion are initiated early. Pain control includes acetaminophen and ice; NSAIDs may be used selectively if appropriate.

Phase 2: Motion Restoration & Early Strength (Weeks 2–4)

Goals include restoration of full ankle range of motion and initiation of strengthening. Peroneal strengthening and posterior tibialis activation are emphasized. Gentle inversion and eversion exercises are introduced as tolerated.

Phase 3: Strength, Balance & Proprioception (Weeks 4–8)

Focus shifts to restoring strength, neuromuscular control, and balance. Single-leg balance, perturbation training, and progressive resistance exercises are emphasized. Attention is paid to calf strength and ankle dorsiflexion mobility.

Phase 4: Return to Sport or Full Activity (Weeks 8–12+)

Gradual return to sport-specific activities including running, cutting, and jumping is initiated. External support such as taping or bracing is recommended during early return. Progression is symptom-guided rather than time-based.

Return-to-Play Criteria

Full, pain-free ankle range of motion; symmetric strength; restored balance and proprioception; ability to perform sport-specific drills without instability or pain.

Failure of Non-Operative Treatment

Persistent pain, recurrent sprains, or feelings of instability should prompt reassessment for chronic ankle instability, occult fracture, or syndesmotic injury.

Key Principles

Early mobilization and balance training are critical. Failure to restore proprioception is a major risk factor for recurrent ankle sprains.

Key References

Doherty C et al. Ankle sprain: pathophysiology and management. *Br J Sports Med.* 2014.

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