KJ Hippensteel, M.D., FAAOS
Sports Medicine
OrthoArizona
P: (602) 795-6300 ext 3174

ANKLE SPRAIN NON-OPERATIVE GUIDELINES

Acute/High Irritability Phase

PRECAUTIONS
• Assess for severity of injury to supporting structures (e.g., peroneal tendon, flexor hallucis longus)

TREATMENT RECOMMENDATIONS
• Gait and stair training
- Focus on optimal loading and early weight bearing
- Encourage symmetrical gait pattern
- Train in use of assistive device if necessary

• Low-grade joint mobilizations focusing on the distal tibiofibular, talocrural, and subtalar joints (e.g., posterior talar glides and mobilizations with movement)
• PROM/active assisted range of motion (AAROM)/AROM of the ankle
- Focus on non-weight bearing (NWB)/limited weight bearing interventions

• Proximal LE and core strengthening, upper extremity (UE) strengthening as needed
• Low irritability ankle/foot strengthening
- Isometrics progressing to isotonics
- Intrinsic strengthening
- Consider blood flow restriction (BFR), with referring provider clearance

• Balance/proprioception
- Seated multi-directional rocker board minimizing stress to injured tissues

• Taping/bracing as needed
• Swelling management
- Protect, rest, ice, compression, elevation (PRICE), modalities

CRITERIA FOR ADVANCEMENT
• Maximize gait with appropriate assistive device
• Pain and swelling controlled

EMPHASIZE
• Swelling management
• Appropriate use of ankle support (i.e., bracing, taping)
• Limit motions which stress healing tissues
- Anterior talofibular ligament (ATFL) limit: Inversion (INV) and Plantarflexion (PF)
- Calcaneofibular ligament (CFL) and posterior talofibular ligament (PTFL) limit: INV
- Deltoid ligament limit: Eversion (EV)
- High ankle sprain limit: Weight-bearing (WB), INV, EV

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Sub-Acute/Moderate Irritability Phase

PRECAUTIONS
• Avoid premature return to activity
• Avoid stretching injured ligaments

TREATMENT RECOMMENDATIONS
• Gait and stair training - Encourage symmetrical gait pattern
• Activities of daily living (ADL) specific training
  - Progressive community ambulation → Heel and toe walking → Descending stairs
• Swelling management - Consider compression sleeve
• Joint and soft tissue mobilizations targeting hypomobile structures in functional positions
• PROM/AROM of the ankle - Address persisting deficits
• Neuromuscular training
• Weight bearing balance/proprioception and strengthening
  - Progression from bilateral to unilateral
  - Progression from static to dynamic
  - Sagittal progressing to multidirectional
  - Progression from level ground to compliant surfaces
    - Multi-directional rockerboard, proprioceptive foam, hemispheric balance trainer
  - Heel rise progression
  - Proximal strengthening and control (focus on core/hip abductors)
  - Kneeling/half kneeling exercises
  - BFR, as needed
• Resume cardio activities if not symptomatic

CRITERIA FOR ADVANCEMENT
• Gait normal without assistive device
• Pain and swelling self-managed as activity increases

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ANKLE SPRAIN NON-OPERATIVE GUIDELINES

Chronic/Low Irritability Phase

TREATMENT RECOMMENDATIONS

- PROM/AROM of the ankle - Address persisting deficits in range of motion and joint mobility
- Weight bearing strengthening
  - Heel rise progression
  - Eccentric control
  - Increase load (reintroduce previously symptomatic movements)
  - Endurance training
- Weight bearing balance/proprioception
  - Progress to unilateral and dynamic stabilization
    - Multi-directional rockerboard, foam, hemispheric balance trainer
    - Sport specific balance/proprioception
    - Perturbations
    - Reactionary drills emphasizing directional and speed changes
    - Working into end ranges
- Incorporate instability into progression
- Work on inclines/declines/sport specific terrain
- Loaded squat variations
  - Bilateral → unilateral
- Progress to single leg side planks
- Return to running progression
- Sport specific progression
  - Plyometrics, agilities, hopping
  - Deceleration and cutting exercises

CRITERIA FOR DISCHARGE

- Full ankle PROM and AROM
- 5/5 strength of all muscle groups
  - At least **90%** closed chain, heel raise work (height x reps) compared to contralateral side
- SLS **≥ 90%** of uninvolved side with minimal foot, hip, or core strategies
- STAR excursion balance test **≥ 90%** of uninvolved side
- Ability to perform ≥ 6” step ups/downs with control
- Patient appropriate functional testing (e.g., hop testing vs. 6-minute walk test)