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REHABILITATION PROTOCOL

Ankle Fracture ORIF — "Slow Down" Protocol

Postoperative Rehabilitation Protocol — Slowed / Protected Pathway (Non-Weight-Bearing x 6 Weeks)

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> This protocol is a general guideline and does not replace individualized medical advice. Timelines vary with the procedure performed, healing, and individual factors. Always follow the specific instructions from your surgeon and physical therapist, which take precedence over this document.

Indications for This Protocol

This more protective approach is used when there is increased risk to healing or stability, including:

- Severe syndesmotic injury
- Intra-articular involvement or cartilage injury
- Complex fracture patterns (Weber C, comminution, high fibula fractures)
- Deltoid ligament repair or reconstruction
- Open injuries or compromised soft tissues
- Medical comorbidities affecting healing, including:
  - Diabetes
  - Peripheral vascular disease
  - Neuropathy
  - Smoking/nicotine use
- Concerns about patient compliance with weight-bearing restrictions

In these situations, a slower progression helps reduce complications and protects the surgical repair.

Immobilization Strategy: Cast vs Boot

Why this matters: While many patients transition to a removable boot at 2 weeks, some patients benefit from continued casting through 6 weeks.

WHEN A CAST MAY BE RECOMMENDED

- Concern for noncompliance with non-weight-bearing
- Severe injury patterns requiring strict protection
- Open fractures or soft tissue compromise
- Patients with neuropathy (reduced protective sensation)
- Situations where minimizing motion is critical for healing

BOOT (MORE FLEXIBLE)

- Allows controlled motion and hygiene
- Requires strict patient adherence

CAST (MORE PROTECTIVE)

- Enforces strict immobilization
- Prevents unintended weight-bearing
- Less reliance on patient compliance
- No removal for exercises

- Risk of premature weight-bearing if misused

Bottom line: A cast is sometimes the safest option when protection—not convenience—is the priority.

Phase 1: Protection

0–2 Weeks Postoperative

GOALS

- Protect fixation and soft tissues
- Allow wound healing
- Control swelling and pain

IMMOBILIZATION

- Posterior splint

WEIGHT-BEARING

- Strict non-weight-bearing

REHABILITATION

- Elevation above heart (as much as possible)
- Toe range of motion
- Quad sets, straight leg raises
- Core and upper body conditioning

Phase 2: Protected Immobilization / Early Motion

2–6 Weeks Postoperative

GOALS

- Protect repair during critical healing phase
- Minimize stiffness (if motion allowed)

IMMOBILIZATION — OPTION A: CAST (MORE PROTECTIVE)

- Short leg cast maintained until 6 weeks
- No ankle motion

REHABILITATION (IF IN BOOT)

- Gentle active and passive ankle ROM
- Ankle alphabet exercises
- Light theraband (plantarflexion/dorsiflexion initially)
- Delay inversion/eversion if syndesmotic/deltoid repair

WEIGHT-BEARING

- Strict non-weight-bearing continues

IMMOBILIZATION — OPTION B: CAM BOOT (SELECT PATIENTS ONLY)

- Removed for hygiene and exercises only
- Requires strict compliance

PRECAUTIONS

- No weight-bearing
- Avoid rotational stress
- Avoid aggressive stretching

Key principle: Protection takes priority over motion in this phase.

Phase 3: Gradual Loading

6–10 Weeks Postoperative

GOALS

- Gradual return to weight-bearing
- Initiate strength recovery
- Begin gait normalization

IMMOBILIZATION

- Transition from cast → boot (if casted)
- Continue boot during progression

WEIGHT-BEARING

- Begin partial weight-bearing at 6 weeks
- Progress to full weight-bearing over 2–4 weeks

REHABILITATION

- Gait training
- Standing weight shifts
- Seated → standing calf raises
- Theraband strengthening (all planes)
- Stationary bike

Phase 4: Transition to Shoe

10–12 Weeks Postoperative

GOALS

- Normalize gait
- Improve strength and balance

WEIGHT-BEARING

- Full weight-bearing in supportive shoe with brace

REHABILITATION

- Double → single-leg heel raises
- Balance training
- Closed-chain strengthening
- Elliptical, low-impact cardio

Phase 5: Advanced Strengthening

12–16+ Weeks Postoperative

GOALS

- Restore strength, endurance, and control

REHABILITATION

- Lunges, step-downs
- Advanced balance training
- Initiate jogging progression (if appropriate)

Phase 6: Return to Sport / Full Activity

4–6+ Months Postoperative

GOALS

- Safe return to full activity

REHABILITATION

- Plyometrics
- Agility and sport-specific drills

RETURN TO SPORT CRITERIA

- Pain-free full weight-bearing
- Near-normal ankle range of motion
- Strength ≥90% of opposite side
- Successful single-leg hop and agility testing
- Physician clearance

Key Patient Education Points

HEALING TAKES TIME

- Healing is biologic and time-dependent, not based on pain alone
- The first 6 weeks are critical to protect:
  - Bone healing
  - Ligament stability (especially syndesmosis)
  - Cartilage recovery

PATIENTS AT HIGHER RISK OF COMPLICATIONS

- Smokers or nicotine users
- Patients with diabetes or vascular disease
- Neuropathy
- Open injuries
- Poor compliance with restrictions

COMMON PITFALLS

- Advancing weight-bearing too early
- Removing the boot against instructions
- Poor swelling control
- Skipping physical therapy