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ANKLE FRACTURE Treatment Guidelines

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General

- This protocol is for patients who have had a stable open reduction internal fixation (ORIF) or a stable closed reduction and casting. ORIF means the patient will have hardware (plate and screws) to stabilize the fracture.
- Anatomic reduction is necessary to restore the normal anatomy of this weight bearing joint. This has significant implications for development of tibiotalar joint arthritis.
- It is important that the patient be compliant because frequently the patients are placed in a removable cast boot.
- Patients with intra-operative evidence of osteoporosis or osteomalacia (esp Diabetics) will be NWB for an extended period of time (generally 8-10 wks)

Phase I – Initial Stability (0 to 6 weeks)

- Non-weight-bearing (NWB) in cast or splint. Weight-bearing status will be set by orthopedic surgeon.
- Ambulatory device training (walker or crutches) and transfers.
- General lower extremity strengthening – SLR, quad sets, etc.

Phase II – Early Range of Motion/Gait training (6-8 weeks)

- Patient is placed in a removable cast boot in orthopedics office (6 weeks).
- Begin NWB ankle ROM exercises – PF, DF, inversion, and eversion.
- Gradually increase weight-bearing (PWB) status so patient is full weight bearing (WBAT) by the end of the 8th week.
- Advance to cane.
- Advance with aggressive stretching program.
- Isometric exercises for PF, DF, inversion and eversion.
- Seated towel toe crunches and push aways (intrinsic foot musculature).
- Stationary bike for range of motion.

- Ice for swelling. Minor swelling usually occurs as patient increases weight-bearing status.

Phase IV – Return to Function (After 8 weeks)

- **Home Exercise Program:**
 - **Theraband strengthening exercises – DF, PF, inversion, eversion**
 - Mini squats, toe raises (bilateral and unilateral)
 - Continue daily stretching – increase aggressiveness
 - Unilateral standing balance (eyes open, eyes closed)
 - Strength program (2-3 sets of 10 repetitions)
 - Total gym squats and toe raises
 - Leg press
 - Hamstring curls
 - Leg extension
 - Endurance
 - Bike
 - Treadmill walking (advance to lateral stepping, backwards walking)
 - Proprioceptive Exercises – advance per tolerance and patients functional needs
 - 4-way straight leg raises with tubing (a.k.a. "steamboats")
 - Proprioceptive star – toe touch and lunges
 - Rebounder
 - Fitter
 - Seated BAPS board, progress to standing
 - Mobilizations per therapist
 - Modalities PRN – Fluidotherapy, moist heat, ice

Guidelines based on information from Brotzman, S.B. and Brasel, J. "Foot and Ankle Rehabilitation," Clinical Orthopedic Rehabilitation. Mosby, 1996. pgs. 258-263.



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