



Total Ankle Arthroplasty Rehabilitation Protocol

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This protocol provides you with general guidelines for initial stage and progression of rehabilitation according to specified time frames, related tissue tolerance and directional preference of movement. Specific changes in the program will be made by the physician as appropriate for the individual patient.

******Please fax initial assessment and subsequent progress notes directly to Dr. Coetzee at 952-456-7641******

REMEMBER: It can take up to a year to make a full recovery, and it is not unusual to have intermittent pains and aches during that time!

PHASE I: DATE OF SURGERY - 6 WEEKS

- Objective: Healing, protection of joint replacement
- Immobilization: Splint; After 2 week follow-up visit: removable boot
- WB Status: Partial weight bearing (50%), using knee scooter, crutches and/or walker to aid with ambulation.

PHASE II: WEEK 6-8

- Objective: Healing, protection of joint replacement
- Immobilization: Use of removable boot as needed. Patient can wean to own foot ware as soon as they are comfortable.
- WB Status: Progress to weight bearing as tolerated.
- Therapy: May be initiated towards the end of this phase, 1-2 x per week with a focus on swelling reduction, pain control, and early return of AROM, home care/exercise instructions for motion, pain/swelling control

PHASE III: WEEK 8-16

- Objective: Swelling reduction, increase in ROM, neuromuscular re-education, develop baseline of ankle control/strength
- WB Status: WBAT
- Therapy: 1-2 x per week based on patient's initial presentation, frequency may be reduced as the patient exhibits good recovery and progress towards goals, instructions in home care and exercise to complement clinical care

- Rehab Program: *Gradual progression is expected with ROM, strength, and function
 - ROM: AROM, PROM, patient directed stretching, joint mobilization
*NOTE – joint mobilization should focus on techniques for general talocrural distraction and facilitating dorsiflexion and plantarflexion. Techniques for inversion and eversion should be minimized and may be contraindicated if the patient has had ancillary procedures such as subtalar fusion or triple arthrodesis. The distal tibiofibular syndesmosis should not be mobilized. Soft tissue techniques may be used for swelling reduction and scar tissue mobilization.
[* Early goals for ROM are 5-10° of dorsiflexion and 25-30° of plantarflexion]
 - Strength: techniques should begin with isometrics in four directions with progression to resistive band/isotonic strengthening for dorsiflexion and plantarflexion. Due to joint fusions, eversion and inversion strengthening should continue isometrically, bands should progress to heavy resistance as tolerated, swimming and biking allowed as tolerated
 - Proprioception: may begin with seated BAPS board and progress to standing balance assisted exercises as tolerated
 - Gait Training: emphasis on smooth cadence, heel strike, and return to walking should be a primary focus

PHASE IV: WEEK 16-24

- Objective: Functional ROM, good strength, adequate proprioception for stable balance, normalize gait, tolerate full day of ADLs/work, return to reasonable recreational activities
- WB status: Full, patient should exhibit normalized gait
- Therapy: 1x every 2-4 weeks based on patient status and progression, to be discharged to an independent exercise program once goals are achieved, patient to be instructed in appropriate home exercise program
- Rehab Program:
 - ROM: Patient to achieve $\geq 10^\circ$ of dorsiflexion and $\geq 40^\circ$ of plantarflexion
*Patients with prior ankle fusion may be limited in ROM with 5° dorsiflexion and 30-35° plantarflexion
 - Strength: Progression to body weight resistance exercises with goal of ability to perform a single leg heel raise
 - Proprioception: patient should be instructed in proprioceptive drills that provide both visual and surface challenges to balance
 - Agility – cone/stick drills, leg press plyometrics, soft landing drills
 - Sports – prior to return to any running or jumping activity the patient must display a normalized gait and have strength to perform repetitive single leg heel raises