Total Ankle Arthroplasty Rehab Protocol

Phase 1 – Maximum Protection Phase (0-6 weeks)

Goals for Phase 1
- Maximum protection
- Minimize effusion
- Proper assistive device use
- Progress hip and quad strength

Post-op Physical Therapy
- 1st PT visit to occur at 4-6 weeks post-op after cast removed

Immobilization
- 0-4 Weeks: cast
- 4-8+ Weeks: walking boot (per physician)

Weight Bearing/Brace
- 4-6 Weeks: NWB (per physician order)
- Progress to WBAT in CAM boot at 4-6 weeks, per physician (based on radiographic evidence)

Range of Motion
- Gentle ankle PROM/AROM DF>PF
- No inversion or eversion to be performed in this phase

Manuel Therapy
- Scar mobility following closure of incision
- Gentle flexibility of lower extremity musculature
- PROM/AROM ankle DF/PF gently
- Joint mobilizations (Grade I-II)

Strengthening
- Quadriceps/Glut setting
- Hip strengthening
- Multi-plane OKC SLR, straight leg bridging, etc. until weight bearing
- Core strengthening

Modalities
- Vasopneumatic compression for edema management 2-3x/week (12-20 min)
- Cryotherapy at home, 3 x per day for 20 minutes each with ankle elevated above heart

Precautions
- No inversion and eversion
- NWB 1st 4-6 weeks in cast, then boot, then progress to weight bearing per physician in boot
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Phase 2 – Early Ankle Active Range of Motion Phase (6-10 weeks)

Goals for Phase 2
- Early ankle AROM
- Minimize effusion
- Pain control
- Emphasis on home exercises
- Maintain hip and quad strength

Immobilization
- **4-8+ Weeks**: walking boot at all times, per physician, including while sleeping

Weight Bearing/Brace
- WBAT in CAM boot or brace, per physician (based on radiographic evidence)
- Wean from assistive device as indicated.

Range of Motion
- Ankle PROM/AROM DF>PF
- **No inversion or eversion** to be performed in this phase

Manual Therapy
- Scar mobility following closure of incision
- Gentle flexibility of lower extremity musculature
- Progress PROM/AROM ankle DF>PF
- Joint mobilizations (Grades II-III)

Strengthening
- **8-10 Weeks**: light resistive ankle strength focusing on PF
- Hip strengthening
- Multi-plane CKC SLR in boot, etc.
- Core strengthening
- Nustep
- Begin bike in boot, no resistance

Aquatics
- Initiate aquatic therapy program when incisions closed
- Focus on normalization of gait pattern at reduced body weight (<50%)

Modalities
- Vasopneumatic compression for edema management, 2-3x/week (12-20 min)
- Cryotherapy at home, 3x per day for 20 minutes each with ankle elevated above the heart

Precautions
- No inversion and eversion
- WBAT in boot for 4-8+ weeks
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Phase 3 – Ankle Active Range of Motion Phase (10-16 weeks)

Goals for Phase 3
• Ankle AROM
• Minimize effusion
• Pain control
• Maintain hip and quad strength

Immobilization/Weight Bearing
• Wean gradually into regular shoe at 10-12 weeks, per physician
• Progress weight bearing 25% 3-4 days until FWB
• Use of assistive device as needed
• Walking boot as pain indicates

Range of Motion
• Ankle AROM progression (DF>PF)
• No inversion or eversion to be performed in this phase

Manual Therapy
• Scar mobility
• Progress flexibility of lower extremity musculature
• Progress PROM/AROM ankle DF>PF
• Joint mobilizations (Grades I-III)

Strengthening
• Stationary bike
• Progress ankle strength resistance DF/PF
• LE strengthening
• Squats, heel raises, etc.
• No BAPS board
• Core strengthening

Neuromuscular Control
• Balance and proprioception in static stance
• Focus on ankle strategies

Aquatics
• Continue with aquatic therapy program

Modalities
• If indicated, continue with vasopneumatic compression for edema management (12-20 min)
• Cryotherapy at home, 1-2x per day for 20 minutes, ankle elevated above heart

Precautions
• No inversion and eversion
• No BAPS board
• Weight bearing progress in shoe
• DF ROM: neutral
• PF ROM: 20-30 deg
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Phase 4 – Return to Activity and Work Phase (16+ weeks)

Goals for Phase 4

- Progress back to regular activities as tolerated

Range of Motion Expectations

- Goal of 10 deg DF, 30 deg PF, but this depends on prior ROM (make functional as possible)

Return to Work

- Sedentary job: no earlier than 3-4 weeks
- Significant standing or walking: no earlier than 4 months
- Anything in between: per physician

Return to Activity

- Low level of activities such as biking, swimming, or walking
- Avoid impact activities that affect the joint

This protocol was updated and reviewed by Dr. Devries and Dr. Scharer of BayCare Foot & Ankle Center and Jessica Sigl, PT, DPT on 02/20/15.
References: