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

Precautions

- No inversion and eversion
- NWB 1st 4-6 weeks in cast, then boot, then progress to weight bearing per physician in boot

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

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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

Precautions

- No inversion and eversion
- WBAT in boot for 4-8+ weeks

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

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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

Precautions

- No inversion and eversion
- No BAPS board
- Weight bearing progress in shoe
- DF ROM: neutral
- *PF ROM:* 20-30 deg

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

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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

TThis 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.

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