

Rehabilitation Phase I (0--3 weeks post-operative)

Criteria to Progress to this Phase

- Cleared by physician to begin physical therapy

Anticipated Impairments and Functional Limitations

- Patient usually immobilized in plantarflexed position initially, followed by lessened ROM restriction
- Limited weight bearing status (usually non-weight bearing or ITWB, followed by progressive weight bearing per physician)
- Pain and edema
- Limited AROM and strength

Goals

- Manage pain and edema
- Increase ROM
- Increase tolerance of muscle contraction

Intervention

- Modalities as needed
- Begin pain-free, non-weight bearing AROM exercises (i.e., ankle pumps) out of brace after one week
- Begin **submaximal** isometrics at multiple angles in all planes at two weeks post-op
- Begin **WBAT in boot** at two weeks post-op
- May begin 4--Way Ankle exercises with Theraband at 3 weeks post-op
- Strengthen intrinsic foot muscles (i.e towel scrunches. marble pick-up)
- Progressive resistance exercises for hip and knee in all ranges Soft tissue/scar mobilization
- Begin cardiovascular training (UBE, deep water exercises. wdl-ic:g cyiing, or cyiing in boot) Patient education

Rehabilitation Phase II (4--6 weeks post-operative)

Criteria to Progress to this Phase

- Cleared by physician to begin physical therapy
- No increased pain or loss of ROM
- Improved tolerance to weight bearing

Anticipated Impairments and Functional Limitations

- Mild pain and edema
- Limited AROM and strength
- Abnormal gait

Goals

- Manage pain and edema
- Increase ROM
- Improve strength and proprioception
- Progress to full weight bearing
- Improve gait on level surfaces

Intervention

- Continue with Phase I interventions as indicated
- Gentle joint mobilizations as indicated (i.e. limited talocrural dorsiflexion)
- Gentle gastroc/soleus stretching, progressing from seated to standing
- Pool therapy (shallow water proprioceptive/gait activities and deep water running) Stationary bicycle (low resistance)
- Seated heel raises progressing to standing heel raises late in phase II
- Pain-free double and single leg Total Gym squats
- Pain-free forward treadmill
- Pain-free partial lunges
- Begin proprioceptive/balancing activities
 - Unilateral balancing (eyes open/eyes closed/catching ball)
 - Rocker board with bilateral stance
 - BAPS board, progress from seated to bilateral standing

Rehabilitation Phase III (7-12 weeks post-operative)

Criteria to Progress to this Phase

- Patient progressing with decreased pain and edema
- Patient progressing with AROM
- Patient no longer needs walking boot

Anticipated Impairments and Functional Limitations

- Mild pain and edema associated with increased activity
- Limited AROM and strength
- Asymmetrical proprioception and limited gait on uneven surfaces

Goals

- Decreased pain with weight bearing and gait Full AROM and PROM
- Initiate Occupational/Sports related activities

Intervention

- Continue interventions as in phase I and II
- Isokinetics performed at pain-free intensities
- Initiate single leg standing BAPS
- Initiate pain-free wall squats
- Progress balance exercise time and/or stand on unstable surface
- 4-way hip exercise on involved extremity
- Progress pain-free forward lunges to unstable surface

- Increase intensity on treadmill
- Initiate lateral and forward step downs (begin with 2 inch step, then progress)
- Begin star exercise with anterior and lateral reach for soleus strengthening
- Initiate appropriate intensity level of occupational/sport specific activities
 - Slide board
 - Hopping, bilateral to unilateral
 - Shuttle leg press and bounding

Rehabilitation Phase IV (12+ weeks post-operative)

Criteria to Progress to this Phase

- Good progression through previous phases with need to return to higher-level P
- Pain-free with ambulation over flat ground
- Normal ROM and strength

Anticipated Impairments and Functional Limitations

- Limited strength and decreased proprioception
- Limited tolerance to higher-level occupational/sporting activities

Goals

- Prevent re-injury with return to sport
- Discharge to independent home exercise program
- Return to occupation/sport

Intervention

- Continuation of exercises from phases I-III as indicated
- Increase demand of pivoting and cutting exercises
- Progress 4-way hip exercise with stance foot on unstable surface
- Progress with functional training and plyometrics
 - Trampoline/BOSU activities
 - Box drills
 - Figure-8 drills
 - Carioca
 - Lateral shuffle