

# Modified Brostrom Repair Rehabilitation Protocol

# Rehabilitation Phase I (4-6 weeks post-operative)

Criteria to Progress to this Phase

• Cleared by physician to begin physical therapy

# Anticipated Impairments and Functional Limitations

- Patient usually immobilized for 6 weeks
- Limited weight bearing status (usually non-weight bearing for 3 weeks 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 PROM taking precaution with plantar flexion and inversion
- Begin submaximal isometrics at multiple angles in.all planes
- Begin AROM for plantar flexion and dorsiflexion only
- Strengthen intrinsic foot muscles
- Progressive resistance exercises for hip and knee in all ranges
- Soft tissue/scar mobilization
- Begin cardiovascular training (UBE, well-leg cycling, or cycling in boot)
- Patient education

## Rehabilitation Phase II (6-8 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

Aaron Askew, MD (541) 382-3344 | Medical Assistant (541) 322-2213

- Improve strength and proprioception
- Wean from walking boot, utilizing it only when increased symptoms
- Improve gait on level surfaces

#### Intervention

- Continue with Phase I interventions as indicated
- Gentle joint mobilizations as indicated (i.e., limited talocmral dorsiflexion)
- Perform AR.OM activities in all ranges
- Gentle gastroc/soleus stretching
- Pool therapy (shallow water proprioceptive/gait activities and deep water mnning)
- Stationary bicycle (low resistance)
- Seated heel raises progressing to standing heel raises
- Pain-free double and single leg Total Gym squats
- Elastic tubing exercises in all planes may be initiated in late phase II
- Pain-free forward treadmill
- Pain-free forward 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 (8-10 weeks post-operative)

#### Criteria to Progress to this Phase

- Patient progressing with decreased pain and edema P11.tientprogressing 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
- Elastic tubing (mild to moderate resistance)
- Isokinetics performed at pain-free intensities
- Initiate single leg standing BAPS (levels 1 or 2 only)
- 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

Aaron Askew, MD (541) 382-3344 | Medical Assistant (541) 322-2213

- 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

#### Rehabilitation Phase IV (10-18 weeks post-operative)

Criteria to Progress to this Phase

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

## **Anticipated Impairments and Functional Limitations**

- Limited strength and decreased proprioception
- Limited tolerance lo 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
- Initiate pain-free lateral lunges
- 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
  - o Box drills
  - Figure-8 drills
  - o Carioca
  - Lateral shuffle