

# Modified Brostrom with Brace/Ligament Reconstruction Protocol

## Dr. Scott M. Holthusen

This protocol provides a general guideline for recovery and progression of rehabilitation according to specified time frames. Specific changes in the program will be made by the physician as appropriate for the individual patient. It may take up to a year to make full recovery, and it is not unusual to have intermittent pains and aches during that time.

\*\*\*Please fax initial assessment and subsequent progress notes directly to Dr. Holthusen at (952) 442-2029.

# PHASE 1: 0-2 WEEKS

#### Goals

- Rest and recovery from surgery
- Control swelling and pain with elevation and activity modification
- Gradual increase of ADLs (Activities of daily living)

### **Guidelines**

- Non-weightbearing in CAM boot for first week followed by gradual weight bearing progression in CAM Boot using crutches.
  - Most people can be without crutches within 2-3 weeks following surgery
- Education: surgery, anatomy, healing time, rehab phases

# \*2-week PA appointment

# PHASE 2: 3-6 WEEKS

### Goals

- Control pain
- Encourage ADLs
- Education: surgery, healing time, anatomy, rehab phases
- Rest and elevation to control swelling and begin massage over incision once healed
- Allow healing while maintaining upper body, core, hip/knee strength and ROM Guidelines
- CAM boot for another week
  - Can get out of the boot to shower, but should also start active ROM.
  - 3 weeks after surgery may begin to transition into Trilok ankle brace
    - Continue CAM boot when fatigued or for activities where you are unsure of the terrain
- Begin PT

## Guidelines

- Hip and knee AROM
  - AROM (Active range of motion) ankle PF (plantar flexion)/ DF (dorsiflexion)/eversion and toe flexion/extension
  - Follow therapist's recommendation on when to begin bike, walk, use elliptical trainer, etc. without the boot
  - All activities are guided by pain level
    - If your pain is less than 3 out of 10, you could continue. If more than that, rehab should be altered and slowed down. If you have an episode of pain more than 7 out of 10 that does not subside within 30 minutes, you should see your surgeon
  - Core exercises abdominal recruitment bridging on ball ball reach arm pulleys or theraband using diagonal patterns
  - Hip: AROM strength: clam, sidelift, glut max, SLR (straight leg raise)
  - Knee: AROM strength: SLR, theraband press or leg machine
  - Stretching: glut max, glut med, piriformis, rectus femoris, hamstrings
  - Can start Proprioception activities and Agility training if pain is minimal,
    ROM is good and everything is going well

# \*6-week MD appointment

# PHASE 3: 7-8 WEEKS

#### Goals

- Still wearing the ankle brace for sporting activities
- Control swelling +/- pain with elevation or modalities as required
- Gait training
- Continue strengthening core, hips and knees, progressing to standing exercises
- Continue to progress AROM of ankle
- Full rehab without restrictions as long as pain/discomfort is 3 out of 10 or less

#### Guidelines

- Manual mobilization to joints not part of ligament reconstruction
- AROM: Inversion/eversion continue with ankle PF/DF, toe flex/extension
- Proprioception activities
- Agility training in regular shoe
- Stationary bicycle
- Muscle stimulation -Intrinsics -Invertors/evertors if required
- Proprioceptive training: single leg stance on even surface

# PHASE 4: 9-10 WEEKS

### Goals

- Full ROM in WB
- Good single leg balance
- Near full strength lower extremity
- Still to use the ankle brace for certain sport specific activities (ie: basketball)

### Guidelines

- Proprioceptive Training
  - single leg stance on even surface with resistance to arms or WB leg
  - double leg stance on wobble board, Sissel, Fitter
  - single leg wobble board, Sissel, Fitter with resistance to arms or NWB leg
- Strength
  - toe raises, lunges, squats

# **PHASE 5: 11-14 WEEKS**

### Goals

- Full functional return to work +/or activity
- Work specific or activity specific training

### **Guidelines**

- Hopping, skipping, running
- · Manual mobilizations if required
- Plyometric training