

# **Ankle Ligament Reconstruction** Internal Brace Rehabilitation Protocol

This protocol provides you with general guidelines for initial stage and progression of rehabilitation according to specified time frames, related tissue tolerance and directional preference of movement. Specific changes in the program will be made by the physician as appropriate for the individual patient.

> \*\*\*\*Please fax initial assessment and subsequent progress notes directly to Dr Coetzee at 952-944-0460.\*\*\*\*

REMEMBER: It can take up to a year to make a full recovery, and it is not unusual to have intermittent pains and aches during that time!

# Phase I: Weeks 1-2

#### Goals

- Rest and recovery from surgery
- Control swelling and pain
- Increase ADL (Activities of daily living)

#### Guidelines

- WB as tolerated to FWB (full weight bearing) in CAM boot or cast. Most people can be without crutches within 3-4 days.
- Sutures removed @ 10 -16 days. CAM boot for another 2 weeks
  - Can get out of the boot to shower, but should also start active ROM (ankle PF (plantar flexion)/DF (dorsiflexion)
  - Stationary bike, walk, use elliptical trainer etc. in the boot.
- Education: surgery, healing time, anatomy, rehab phases
- Encourage ADL
- Rest and elevation to control swelling
- Control pain
- Hip and knee AROM

#### Phase II: Weeks 3-6

\*\*\*WILL BE DETERMINED WITH YOUR PHYSICAL THERAPIST- One could progress to Phase III earlier if goals are met and pain is minimal\*\*\*

#### Goals

Allow healing while maintaining upper body, core, hip/knee strength and ROM

# Phase II: Weeks 3-6 (cont.)

#### Guidelines

- All should be Full WB by 3 weeks. Can start to walk without the Boot. Use Boot for fatigue and activities where you are unsure of the terrain.
- Massage for swelling
- Elevation to control swelling
- @ 4 weeks after surgery:
  - Start official rehab. (High impact athletes may be given a BioSkin ankle brace at post op visit -doctor's discretion).
  - Begin AROM (Active range of motion) ankle PF/DF/inversion/eversion and toe flexion/extension
  - Can 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.

#### Phase III: Weeks 6-8

# \*\*\*WILL BE DETERMINED WITH YOUR PHYSICAL THERAPIST- One could progress to Phase IV and V if goals are met and pain is minimal\*\*\*

#### **Goals**

•All and any activity with pain and swelling controlled.

#### **Guidelines**

- Full rehab without restrictions as long as pain/discomfort is 3 out of 10 or less.
- Stationary bicycle
- AROM:
  - Inversion/eversion
  - continue with ankle PF/DF, toe flex/extension
- Continue with
  - core exercises progress to standing exercises
  - hip strength exercises
  - knee strength exercises
- Manual mobilization to joints not part of ligament reconstruction

# Proprioception activities

# Phase III: Weeks 6-8 (cont.)

Guidelines cont.

- Agility training
- Wear BioSkin ankle brace (High impact athletes if directed by MD during post op visit)
- Control swelling +/- pain with elevation or modalities as required
- AROM in WB
- Manual mobilization as required
- Muscle stimulation
  - -Intrinsics
  - -Invertors/evertors if required
  - -Gait training
  - -Continue strengthening core, hips and knees
  - -Proprioceptive training: single leg stance on even surface

# Phase IV: Week 8-9

#### Goals

- Full ROM in WB
- Good single leg balance
- Near full strength lower extremity

#### **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
  - hopping, skipping, running @ 14+ weeks
  - manual mobilizations if required

### Phase V: Week 10+

#### Goals

Full functional return to work +/or activity

#### **Guidelines**

- Continue to build endurance
- · Work specific or activity specific training
- Plyometric training