

### **ACL Reconstruction**

# D. Charles Eggert, MD Post-Operative Protocol

#### Phase I - Maximum Protection (Weeks 0 to 2):

#### 0 to 1 Week:

- Knee immobilizer and crutches while ambulating until quad function returns
- Weight bear as tolerated

#### Goals

- Reduce inflammation
- Normalize patella mobility with manual mobilizations
- Full extension
- 90° 100° of knee flexion, progressing to full as tolerated

#### Exercise progression

- Quadriceps setting using NMES as needed
- Multi-plane straight leg raising
- Gait training

#### Weeks 1 to 2:

#### Goals

- Reduce inflammation
- Full knee extension/hyperextension
- 100° 120° of knee flexion, progress as tolerated

#### Phase II - Progressive Stretching and Early Strengthening (Weeks 2 to 6):

#### Weeks 2 to 4:

#### Goals

- Progress off crutches
- Full knee extension/hyperextension
- Knee flexion to 120°, progress as tolerated
- Normalize gait mechanics
- Normalize patellofemoral joint and scar mobility

#### Exercise progression

- Bilateral squat progression
- Multi-plane open and closed kinetic chain hip strengthening
- Step-up progression
- Stationary biking and treadmill/outdoor walking
- Deep water pool program when incisions healed; focus on ROM
- Proprioception drills

#### Weeks 4 to 6:

#### Goals

- Reduce inflammation
- Full ROM
- Normal gait

#### Exercise progression

- Leg press, hamstrings curls
- Increase intensity of stationary bike program, may add elevation to treadmill walking and elliptical
- Advance intensity of deep water pool program; focus on endurance training

#### Phase III – Advanced Strengthening and Endurance Training (Weeks 6 to 12):

#### Weeks 6 to 12:

#### Goals

- Full knee flexion and extension with terminal stretch
- Progressive strengthening
- Increase muscular endurance

#### Exercise progression

- Weighted squat progression
- Lunge progression (retro, walk and split) as indicated
- Controlled movement series

#### Weeks 8 to 10:

#### Exercise progression

- Outdoor biking week 8
- Lateral lunge progression week 8-10
- Shallow water pool running week 8-10
- Swimming free style week 8-10
- Backward elevated treadmill walking week 8-10
- Basic ladder series week 10

#### Phase IV - Advance Strengthening and Running progression (Weeks 12 to 28):

#### Exercise progression – (Weeks 12-24)

- Progress resistance with squat and lunge strengthening program, may add leg extensions at 30° - 0° (exclude patients with patellar or trochlear groove chondral pathology)
- Linear running progression
- Advanced ladder series
- Basic plyometric box progression
- Fit functional brace

#### Return to Sport and Functional Drills Phase (Weeks 24 to 28)

- Interval golf program
- Advance ladder, hurdle and plyo box progressions
- Sport specific field/court drills with brace on
- Non-contact drills

#### Sports test and follow-up with physician

- Follow-up examination with the physician
- Sports test for return to competition at 6 to 8 months

## Return to full sports participation without restrictions is anticipated at approximately 7-9 months depending on sport

Please have Physical Therapist call Dr. Eggert with any questions. 952-442-2163