



## **Dr. Allen ACL Reconstruction Rehabilitation Protocol**

### **Patellar BTB Autograft**

#### **Phase I: Motion (Weeks 0-6)**

##### Weeks 0-2

- Leave dressings in place until first PT visit (around POD #1-3)
  - Ok to shower POD #3
  - Don't soak wound, pat dry and cover with fresh bandage
- Cryotherapy, effusion control, pain management
- Scheduled NSAIDs & Tylenol
- Opioids for break through pain (goal to wean by end of week 2)
- Aspirin 81mg BID for DVT prophylaxis x4 weeks
- Weight bearing as tolerated, wean from crutches within 2-3 weeks
- Brace locked in full extension when ambulating for 10-21 days
  - Can unlock brace when able to SLR without lag (good quad control)
  - Goal to wean from brace by 6 weeks
- Rest with knee in full extension (no pillows behind knee when sleeping)
- Motion goals: 0-100° PROM
- Patellar mobilizations
- Prone hangs, heel props
- Quad sets, heel slides, 4-way SLRs, calf raises, ankle pumps, leg press
- Gait training to restore normal gait

##### Weeks 2-4

- First post-op visit at 2 weeks, sutures will be removed at this visit
- Start to wean from crutches & brace



- Cryotherapy, effusion control, pain management
- Scheduled NSAIDs & Tylenol
- Finish Aspirin 81mg BID for DVT prophylaxis x4 weeks
- Motion goals: 0-120° PROM
  - Stationary bike
  - Maintain full extension, regain full flexion
- Patellar mobilizations
- Gentle stretching of hamstrings & gastroc-soleus complex
- Gait training to restore normal gait
- Strengthening
  - Prone hamstring curls, 4-way SLRs,
  - Closed chain presses
  - Mini squats, ball squats, wall slides, leg press
  - Bridge, clamshells, hip hikes

## Weeks 4-6

- Wean from crutches & brace (discontinue completely by 6 weeks)
- Cryotherapy, effusion control, pain management
- Motion goals: 0-130° AROM
  - Stationary bike
- Normal gait
- Advance strengthening
- Balance: Double leg balance, static progress to dynamic, progress to single

leg

## **Phase II: Strengthening (Weeks 6-12) *RISK PHASE FOR RE-RUPTURE***

- Second post-op visit at 6 weeks (need full extension at this visit)
  - Goal to come to appointment with normal gait, no brace, no crutches
- Continue cryotherapy, effusion control, pain modalities as needed
- Maintain full motion
- Elliptical, stationary bike, flutter kick swimming, pool jogging, stair climber
- Walking, side steps, step overs, forward and backwards
- Closed chain strengthening
  - Leg press, squats, hip bridges, heel raises, core
- Balance: Single leg dynamic exercises

## **Phase III: Jogging (Weeks 12-20)**

### Weeks 12-16

- Third post-op visit at 12 weeks
- Begin straight line jogging
- Advance closed chain exercises
- Advance balance exercises
- Progress cardio (biking, swimming, elliptical)

### Weeks 16-20

- Biodex testing at 16 weeks (goal ~70% of unaffected extremity)
- Progress running program
- Initiate low velocity agility drills
  - Skipping, side shuffle, carioca, crossovers, backwards jog

-Double leg landing/jumping mechanics

#### **Phase IV: Agility & Landing (Weeks 20-28)**

##### Weeks 20-24

- Advance running program
- Initiate high velocity agility drills
  - Cutting, pivoting, ladder drills,
- Single leg landing/jumping mechanics
- Sport specific drills
- Biodex testing (goal ~85% unaffected extremity)

##### Weeks 24-28

- Fourth post-op visit at ~24 weeks (6 months)
- Advance sport activity
  - Non-competitive drills x2 weeks
  - Competitive drills x2 weeks

#### **Phase V: Return to sports (Weeks 28+)**

- Return to full sport participation (not before 7 months)
  - Non-contact practice x2-4 weeks
  - Contact practice x2-4 weeks
  - Brace fitting for downhill skiers
- Game competitions (7-10 months post-op)

-Final follow up @ 1 year post-op