



### **6-12 Weeks s/p ACL Reconstruction**

**GOALS:** Full ROM                      Increased quad endurance and coordination  
Normal gait                      Discontinue use of brace

#### **ROM**

Maintain full / hyperextension

Restore full flexion. Patient should have full ROM prior to beginning a strengthening phase. Body-weight and low load exercises are okay but focus should be motion before strength.

#### **STRENGTH**

##### Step up and step down exercises

Increase reps and sets to favor volume/hypertrophy. May increase load but muscle endurance is the goal at this time.

Retro ambulation program with resistance to work posterior chain

Squat / Push variations for lower extremity. Increase reps and sets with low resistance

Hip Hinge variations for lower extremity. Same progression as squat / push

Rotation (foot not planted) and anti-rotation for trunk muscles

**PROPRIOCEPTION** – Okay to begin unstable (AIREX only) surface provided patient shows good control on stable surface

#### **CARDIO**

- Incline treadmill / Elliptical / Swimming (avoid flip turns)
- Stationary biking – Outdoor cycling okay, avoid clip in pedals. Favor interval training over steady state
- May begin pool jogging / Alter-G between 9-10 weeks based on strength. Water must be at chest level, Alter-G no more than 25% of body weight while running

Criteria for progression to next phase:

- Symmetric SL step down from 6 inch height when compared to non-surgical leg
- Full ROM
- Minimal to no effusion

*Restrictions:*

Lateral (sagittal plane) motions okay at this time, walking speed only, no pivoting/transverse plane motion at the knee

## 12-18 Weeks s/p ACL Reconstruction

### **ROM**

Maintain full ROM  
Ankle, hip, thoracic spine and shoulder mobility exercises

### **STRENGTH**

May begin to increase load/resistance at this time. We prefer a linear progression of increased load over % of 1 RM or RPE. Increase the load of the lifts below by between 1 and 5 lbs per session. Must have 48 hours of rest between sessions if doing linear progression. Programming should not exceed 24 reps total (3x8, 4x6, etc.) for any 1 exercise per session due to load intensity.

Clinician may choose from any of the exercises below (variations based on individual patient are okay)

Ideally select 2 push movements for every 1 hip hinge movement

Squat/Push movement examples - Back, Front, Overhead, Box step up, Hex Bar, Total Gym, Leg press, etc.

Hip hinge examples - Single and double leg variations (Deadlift, RDL, Hip thrusters, GHD, Nordic hamstring, Good mornings, etc.)

Accessory lifts as needed

Continue linear progression of loading until patient plateaus. After patient plateaus, may change to a % 1RM program or RPE.

AVOID resisted OKC knee extension

### **PROPRIOCEPTION**

Con't with unstable surface and progress to eyes closed. NO LIFTING / STRENGTH EXERCISES WHILE ON UNSTABLE SURFACE (Bosu, AirEx pad, etc.)

### **CARDIO**

Begin jogging / running program at 12 weeks if single leg step down test is symmetric

Cycling – May clip into pedals on road biking and XC mountain biking. Avoid enduro/downhill style riding

Hiking – May begin to wear a heavier, multi-day pack

Swimming – Flip turns okay at this time

### **SPORT SPECIFIC DRILLS**

Footwork drills at slow speeds – MUST AVOID PIVOTING

Throwing program can begin – Do not exceed 90 feet

Kicking program can begin – No cleats, ball must stay on the ground, volleys okay

Basketball shooting can begin – Spot shooting only, no defenders, minimal jump

Mini hurdle hops can begin. Progress based off dynamic control of knee.

**Criteria to progress:** No compensation during lifts                      Strength is increasing  
No increased effusion after activity



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### **18-20+ Weeks s/p ACL Reconstruction**

#### **ROM**

Maintain full ROM  
Ankle, hip, thoracic spine and shoulder mobility exercises

#### **STRENGTH**

Continue with CKC strength. Continue to progress squat variations and hip hinge variations. Progressive overload. Continue to increase load/resistance rather than increasing volume/reps.

Once the athlete has plateaued, they may switch to a % of 1 RM training program

Plyometrics – 2 legged only. One legged may begin around 7 months post op based on dynamic knee control

Olympic lifting and triple extension exercises of LE okay at this time

#### **PROPRIOCEPTION**

As needed for patient to feel more confident in spatial awareness

#### **CARDIO**

Sprinting may begin  
Cycling as tolerated  
Swimming as tolerated

#### **SPORT SPECIFIC DRILLS**

Agility / footwork drills – Sagittal and Frontal plane motions. May begin light transverse plane motion in controlled settings and supervised.

Progress running program – cutting, begin with curves and progress speed and angle of cut based on strength and coordination. No hard / full speed cutting until 7-8 months post op

#### **RPT Criteria for athletes**

1. SL push strength 100% of uninvolved leg - Isokinetic testing okay
2. Blazepod testing – Lateral slide and 4 corners
3. 400 m run under 75 seconds (Power)
4. Reactive testing (shuttle test, 10 yard L, distance hop, crossover hop) pain free and confident
5. Psychologically ready to compete

**Frequency & Duration:** (circle one) 1-2    2-3 x/week for \_\_\_\_ weeks    \*\*Send progress notes.

**Physician's Signature:** \_\_\_\_\_ **M.D.**

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