

590 Wakara Way Salt Lake City, UT 84108 Tel: (801) 587-7040 Fax: (801)587-7112

Lic. # 8234797-1205

# Physical Therapy Prescription ACL Reconstruction + Lemaire + Meniscus Repair

Patient Name: DOB:

Sex:

Date: Surgery Date: Dx: s/p ( LEFT / RIGHT ) ACL RECONSTRUCTION with Lemaire + Meniscus Repair

0-2 WEEKS POST-OP

Rehabilitation
Goals
Protect graft
Reduce swelling
Regain full extension

Improve guad control

\*May begin PT prior to post op visit if patient has no concerns

#### 2-6 WEEKS POST-OP

\*\*\*Due to meniscus repair, patient should ambulate with brace locked in full extension until 4 weeks post op. Patient may unlock brace 4 weeks after surgery with walking\*\*\*

**Rehabilitation** • Protect graft

Full extension – Expect more stiffness with ALL augment than standard ACL-R

No extensor lag with SLR

**Modalities** Cryokinetics to facilitate therapy if needed.

Gait WBAT - Use crutches as needed for pain control

Brace locked in full extension x 4 weeks with weight bearing

ROM

\*Patient must
have full
extension and
greater than 120
degrees flexion
before high load
strength exercises

Progress ROM – Goal of 120 degrees of flexion by week 4.

Expect more stiffness with ALL augment than standard ACL-R

o No flexion restrictions for ROM exercises in a NWB position.
Focus on getting full extension with prone and supine hangs.
o May add weight based on pain tolerance.
Stationary bike okay to "rock for range".

Standing TKE with ball and/or band as resistance

Strength

Straight Leg Raises

o If no extensor lag, ok to add up to 5#.

\*No CKC strength Quadriceps re-education. Russian Stim with quad set and/or SAQ past 30 degrees \*Leg press / Total Gym / Suspension Trainer - start with eccentrics. Progressive overload

flexion x 4 weeks. with regard resistance.

Anti-rotation exercises for trunk musculature

Bridging / Hip hinge exercises

**Proprioception** Weight shifts progressing to SL balance, stable surface and multi-directional

**Cardio** Stationary bike

\*Patient should UBE

not lose ROM as a Swimming (Must be 3 weeks post op) result of cardio

Criteria to progress

• Full extension (including hyper) – Within 30 degrees of flexion to contralateral knee

WB with little to no pain, normal gait

 SL leg press 20% of body weight x 8 reps – If no leg press available, 20 reps of SLR @ 5# with no lag



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## 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. Bodyweight 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.

<u>Retro ambulation</u> program with resistance to work posterior chain <u>Squat / Push variations</u> for lower extremity. Increase reps and sets with low resistance <u>Hip Hinge variations</u> for lower extremity. Same progression as squat / push <u>Rotation</u> (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



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## 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

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

<u>Hip hinge examples</u> - 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.	

NPI: 1689851354