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Physical Therapy Prescription
ACL Reconstruction

Patient Name: **DOB:**
Sex:
Date: **Surgery Date:**

Dx: s/p (LEFT / RIGHT) ACL RECONSTRUCTION

0-2 WEEKS POST-OP

GOALS
- Protect graft
- Reduce swelling
- Regain full extension
- Improve quad control

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

2-6 WEEKS POST-OP

GOALS
- Protect graft
- Normalize gait
- Full extension
- No extensor lag with SLR

Modalities
- Cryokinetics to facilitate therapy if needed.

Gait
- WBAT - Use brace and crutches as needed for pain control
- Gait training with mini-hurdles focused on hip and knee flexion

ROM
*Patient must have full extension (INCLUDING HYPER) and greater than 120 degrees flexion before high load strength exercises
- Progress ROM – Goal of 120 degrees of flexion by week 4.
  - No flexion restrictions for ROM exercises.
- Focus on getting full extension with prone and supine hangs.
  - May add weight based on pain tolerance.
- Stationary bike okay to "rock for range".
- Standing TKE with ball and/or band as resistance

STRENGTH
*Premium on ROM over strength.
- Straight Leg Raises
  - If no extensor lag, ok to add up to 5#. After 5#'s, progress to CKC strength
- Quadriceps re-education. Russian Stim with quad set and/or SAQ
- Leg press / Total Gym / Suspension Trainer - start with eccentrics. Progressive overload in resistance.
- Anti-rotation exercises for trunk musculature
- Bridging / Hip hinge exercises

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

CARDIO
*Patient should not lose ROM as a result of cardio
- Stationary bike
- UBE
- Swimming (Must be 3 weeks post op)
- Incline treadmill walking

Criteria for progression to next phase:
- Full extension (Including hyperextension) – Within 30 degrees of flexion to contralateral knee
- WB with little to no pain, normal gait
- Single leg - Leg press 20% of body weight x 8 reps – If no leg press available, 20 reps of SLR with no lag

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6-12 Weeks s/p ACL Reconstruction

GOALS: Full ROM Increased quad endurance and coordination
Normal gait

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 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

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
- No anterior knee pain/PFPS symptoms

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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