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# ACL RECONSTRUCTION WITH MEDIAL MENISCUS REPAIR PROTOCOL

# PRE-OP

- Perform preoperative evaluation with LROM brace fitting.
- Begin preoperative rehabilitation program to regain range of motion, strength, and normalize gait pattern
- Explain pre- and post-surgery goals
- Patient and family education regarding surgical procedures and current pathology

## 1-4 DAYS POST-OP

#### Restrictions

- Wear LROM brace locked at 0° while sleeping or walking, otherwise it may be removed for exercises as needed
- No knee flexion past 90° x 6 weeks
- Emphasize terminal knee extension, unless posterior-lateral complex injury
- Cryotherapy as often as tolerated without direct contact to the skin
- Ambulate TTWB with crutches and LROM brace locked in full extension (unless otherwise instructed by MD)
- Elevate lower extremity with knee straight. (No pillows under knee)
- Notify physician if fever of 100° or more
- Dressing remains on for 2 days. May shower after all the postoperative dressing is removed (usually day 2) and adequate leg control returns.

# Rehabilitation

- Began postop program day 1
- Heel prop on towel roll for passive knee extension or prone leg hangs for 5-10 minutes, 3 times a day
- Active or active-assistive heel slides in a long sitting position.
- Quad sets on small towel (to better engage the quads)
- Straight leg raises 2-3 times per day with assistance until patient can reduce knee extension lag to less than 15°
- Patella mobilizations as tolerated
- Gravity assisted knee flexion off of the table or heel slides on floor while in a chair (ie. for meals)

- AROM of the ankle/ankle pumps/DVT prevention
- Gastroc-Soleus stretches
- Hamstring stretches in long sitting
- Blood Flow Restriction Therapy may start 6 days post op
- End with Cryotherapy and IFC for pain and inflammation

## **4-14 DAYS POST-OP**

## Restrictions

- Continue to ambulate TTWB with crutches and LROM brace locked in 0° extension.
- Continue elevation and cryotherapy
- Continue sleeping with the brace locked at 0°
- Monitor incision for appropriate healing. Notify physician if increased redness or drainage continues

#### Rehabilitation

- Goal: > 90° of flexion with at least 0° extension
- Continue all exercises from previous phase
- Continue BFR with NMES
- Hamstring isometrics (may need to wait if hamstring autograft)
- 4 way SLR when adequate leg control returns
- Side-lying hip ER strengthening
- Modalities as needed for pain/effusion

# **2-6 WEEKS POST-OP**

#### Restrictions

- Continue cryotherapy
- Continue to ambulate TTWB with crutches and LROM brace locked in 0° extension.
- Continue with LROM brace while sleeping and walking

#### Rehabilitation

- Advance previous exercises as tolerated with ankle weights starting above the knee working towards below the knee
- Continue BFR with OKC exercises
- No knee flexion past 90 degrees until 6 weeks post op
- Begin active hamstring curls, progress to resistive as tolerated
- Active knee extension in a SAQ ROM only 45° 0° if no patellofemoral pain
- Scar massage/mobilization as needed

## 6-8 WEEKS POST-OP

#### Restrictions

- Must enforce a normal gait pattern
- Must regain normal range of motion
- No running, jumping, or plyometric activities yet

#### Rehabilitation

- Protect patellofemoral joint and adjust exercises accordingly
- Begin weight-shift exercises out of the brace as weight-bearing restrictions allow
- Once full weight-bearing, initiate bilateral calf raises
- Begin forward step ups: Start at 4 inches>> 6 inches>> 8 inches
- Gait training, in-line walking, cones forwards and lateral
- May begin aquatic therapy once incision is completely healed
- Advanced CKC exercises to partial squats>full squats>leg press 0-70°, bilateral>> unilateral, eccentrically focused>wall squats
- Advance to balance and proprioceptive retraining
- Advanced stationary cycling to endurance training>> interval training

## **8-12 WEEKS POST-OP**

- Advance CKC strengthening, focusing on sport specific routine
- Advance proprioception and balance routine, BOSU, Therapad, Rebounder, etc.
- Measure for functional knee brace

# 12-16 WEEKS POST-OP

- Advance to 4 way hip machine, elliptical trainer, hamstring machine as tolerated
- If muscle tone, strength and proprioception are sufficient, start light jogging program (no cutting or pivoting)
- Begin light agility drills, advancing from to leg activities to single leg
- Begin plyometrics, advance from to leg activities to single leg
- Began light sport specific drills

## **4-6 MONTHS POST-OP**

- Continue strengthening, plyometrics, proprioception, agility training, sport running program
- Advance sport specific drills

•	Return to normal activity after being released by the physician.