ACL Rehab Protocol with
Meniscal Repair

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Goals:
- 0-90° for 5 weeks
- 50% WB for two - five weeks, using crutches all times
- Pain/edema reduction
- Enhance quad recruitment

1-3 days post op
- Modalities as needed
- Begin Patella mobilizations
- Scar management
- Quad sets/Hamstring co-contractions at multiple angles 10x10 2-3x’s daily
- SLR in brace at 0° until quad control sufficient to prevent proximal tibia from dropping 10x10 2-3 x’s daily
- Obtain full passive extension with bolster under heel or prone with leg off table, do not force hyperextend the knee
- Heel slides with in ROM limits
- Time Modulated AC (a.k.a. Russian stim)

4-7 days post op
- Cont. as above
- Stationary bike with seat high and lower to normal height as tolerated
- NK table leg curls, standing leg curls with cuff weights
- Prone leg curls if tolerated
  - If MCL is sprained, leg curls will be painful, hold off till 4-6 weeks post op
  - Leg press with both legs with 50% BW max.

2-5 weeks post op
- D/C brace and crutches, advance weight bearing to tolerance (wait until instructed by physician)

2 weeks post op
- Cont. as above
- Aquatic therapy if available – after post op visit with doctor. Perform functional ROM, water level waist deep or higher, forwards/backwards marching or walking, lateral stepping, use caution with adduction movements if MCL is sprained

3 weeks post op
- Leg extensions with anti-shear device, cuff weights 5lb max, progress weight as tolerated keeping resistance proximal on tibia

5 weeks post op
- Cont. as above
- Advance ROM as tolerated
• Unilateral step ups, start with 2” height and progress to normal step height as tolerated while emphasizing control during the descent phase of the step up
• Single leg stands for balance/proproprioception on Airex pad or trampoline
• Cable Column ex’ s if good quad control present, retro-walking, lateral stepping, shuffling, no cross over steps
• Treadmill forwards and retro-walking
• Chair squats/Wall Squats keeping tibia perpendicular to floor
• Lunges, lunge walks, lunge squats, keeping tibia perpendicular to floor
• Versa climber, Nordic Track, Elliptical trainers,
• Fitter
• No twisting, pivoting, or hopping movements, all actions are linear

6 weeks post op
• Cont. as above
• D/C Time Modulated AC (a.k.a. Russian stim)
• Begin use of conventional weight lifting equipment (ie. Leg extension machines, smith machines, squat racks etc),
  • start with light weight and high reps and sets and progress towards shorter sets and reps and high weight
  • if hamstring graft or allograft used wait until 8 weeks post op before using leg extension machines

7 weeks post op
• Cont. as above
• Stair Master – shallow steps with flat feet on steps and weight on heels, progress depth as tolerated to normal step depth
• Single leg squats
• All exercises should now be on affected leg only
• Slide Board – start with short distance and progress as tolerated

10 weeks post op
• Cont. as above
• Initiate assessment of Jogging on treadmill (Wait for 3 months for this if Hamstring or Allograft used)
• Plyometrics (Wait for 3 months for this if Hamstring or Allograft used)
  • Low intensity vertical and lateral hopping with both feet moving to single leg ASAP
  • Volume for plyometrics (this is not a conditioning exercise but a strengthening one) for rehabilitation
    • 40-60 foot contacts/session for beginners
    • 60-80 foot contacts/session for intermediate
    • 80-100 + foot contacts/session for advanced
  • If plyometric intensity is high then volume must be decreased, give ample recovery time between sets
• 2-3 sessions per week preferably on weight lifting days
• Lateral movements – shuffling, stepping, and hopping, carioca etc.
• Isokinetic ex: 180, 150, 120, 90, 60°/s and back up 10 reps each
• Initiate eccentric quad ex’s with manual resistance

12 weeks post op
• Cont. as above
• Initiate sport specific activities under supervision of ATC or PT
• Emphasize plyometrics for LE speed and power

16 weeks – 6 months post op
• Cont. as above
• Running and sport specific drill under supervision of ATC or PT
• Isokinetic Strength Test (see attached protocol) Quad strength difference ≤ 15 %
• Continue strength testing monthly until patient passes then perform functional testing