Redeemer Health

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ACL/PCL RECONSTRUCTION REHAB

1) The goals of this protocol are to protect the reconstructions while preventing knee stiffness.
2) Early passive ROM exercises are very important, as is preventing excessive anterior and/or posterior tibia translation.
3) Initial post operative brace after surgery.
4) The patient will be in brace (preferably brace for 6 months after)
5) The patient will be touch down weight bearing to 50% for 6 weeks post op

Goals: (1 day to 6 weeks post operative)

• Full knee ROM—**all ROM exercises must be performed in the prone or side lying position for the first six weeks , or always have slight anterior translation on tibia for ROM exercises.**
• Touch down to 50% weight bearing in brace, must use crutches for the first six weeks
• Pain/edema reduction
• Begin and enhance normalization of quad recruitment
• Prevent anterior/posterior translation and tibia rotation 1day – 6 weeks post op
• Modalities as needed
• Brace locked at 0º for the first two weeks. Can be unlocked only for prone ROM exercises by ATC or PT.
• Brace full ROM if able to tolerate from weeks 2-6
• Teach partner to perform home stretching exercises 2-3 times daily
• ROM exercises: In prone position or side lying only, grip the heads of the gastroc/soleus group and maintain neutral pressure proximally to the tibia while flexing the knee
• Advance ROM as tolerated
• Begin patella mobilizations
• Scar management
• Quad sets/SLR in brace at 0º (assist patient with this exercise until solid quad contraction developed, prevent posterior sag) 10x10 3 times daily.
May use ankle weights as they will increase anterior translation
• NO hamstring isometrics for seven weeks
• Seated calf exercises
• Time modulated AC (also known as Russian stim) in full extension
• Teach quad exercises for home program
• PT visits twice weekly for the first month

6-8 weeks post op

• Continue as above

• May begin aquatic therapy emphasizing normal gait, marching forward/backward
• Weaning off crutches and normalize gait mechanics
• Full WB as tolerated
• ROM—prone flexion 120º or more, and advance to full ASAP
• Treadmill walking—forward and retro
• Closed and open chain tubing exercises
• Single leg stands for balance/proprioception on Airex pad or trampoline
• Chair/wall squats—keep tibia perpendicular to floor
• Unilateral step-ups—start with 2" height and progress to normal step height as able

10 weeks post op

• Continue as above
• All exercises should be on affected leg only at this time
• ROM should be progressing; if not, contact doctor
• Stairmaster
• Slide board—start with short distance and progress as tolerated
• Versa climber
• Nordic track and elliptical trainers
• Cable column exercises—retro walking, lateral stepping, NO cross over stepping or shuffling
• Standing leg curls with cuff weights or seated leg curls 5 lbs max
• Advance strengthening for quads as tolerated

12 weeks post op

• Continue as above
• Advance hamstring strengthening into prone position
• Assessment of jogging on treadmill
• Lateral movement supervised by ATC or PT
    o Stepping, shuffling, hopping, cariocas
• Isokinetic exercises 180, 150, 120, 90, 60º/sec 8-10 reps each speed up and down spectrum
• Jack Brace may be removed for sleeping but continued for all daytime activity

16-24 weeks post op

• Continue as above
• Plyometrics—low intensity vertical and lateral hopping to begin, use both feet and move to one foot ASAP
    o 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 exercise intensity is high, the volume must be decreased. Give ample recovery time between sets.
• 2-3 sessions per week, preferably on weight lifting days
• Initiate sport specific activities under supervision by ATC or PT

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24 weeks post op (6 months +)

- Continue as above
- D/C brace
- Emphasize strength and power development
- Running and sport specific drills under ATC or PT supervision
- Isokinetic test for quad strength difference ≤ 15% and unilateral hamstring/quad strength ratio of 65% or better
- Continue strength testing monthly until patient passes, then perform functional testing
- Functional testing is appropriate for people returning to advanced recreational activities or sports