Sutter Health

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ACL Reconstruction, LCL Reconstruction, and Meniscus Repair:

The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course after an ACL reconstruction, LCL reconstruction and meniscus repair. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

INDIVIDUAL CONSIDERATIONS:

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**Weight bearing status after ACL and LCL reconstruction: NWB x 5 weeks
**ROM during exercises: 0-90 degrees x 6 weeks

Phase 1 (Weeks 0-5)

- Patient is NWB for all ambulatory activities and uses a long-leg brace locked in full extension at all times
- Cryotherapy, quad sets, patella mobilization, and the possible use of TENS or NMES. Ankle pumps and elevation are encouraged for edema control
- Patient is allowed to bear weight equally on both legs when standing stationary

Phase 2 (Weeks 5-10)

- Patient begins PWB gait of approximately 20% of body- weight and increases incrementally by 20% each week
    - Week 5-6: PWB (25-50% body weight) with brace set at 0-90°
    - Week 6: Full weight bearing and discontinue brace as soon as normal gait pattern/quad control is achieved
- Long-leg brace is opened to full flexion and the patient is allowed to begin passive or active-assisted flexion without active hamstring activity. Brace can be discontinued at night. Stationary cycling is permitted
- Continue with quadriceps strengthening and patella mobilization. Can begin

short-arc quadriceps and long-arc quadriceps strengthening. Hip strengthening can be initiated, but should avoid motions that promote increased knee varus or valgus depending upon involved structures.

Phase III (Weeks 10-16)

- Long-leg brace is discontinued and patient is fitted for a functional brace for ADL that may stress the reconstruction
- Closed chain exercises are initiated in a 0-60 degrees range. ROM exercises are continued and patient should be able to flex to 110 degrees or greater by the end of postop month
- Proprioception is emphasized in addition to proper gait Mechanics

Phase VI (Months 4-6)

- Patient may begin straight-line jogging if adequate strength and proprioception are obtained.
- Isolated hamstring strengthening against gravity without weight is initiated at end of postop month 5 and resistive hamstrings can be introduced at end of postop month 6 with of 120 degrees is desirable at this point. A 10-15 degree terminal flexion deficit is typical
- Aggressive quadriceps strengthening is implemented. Can begin low-intensity plyometric program at the end of postop month 5. In addition low-intensity sport-specific activities

Phase V (Months 6-12)

- Continue with above program for anticipated return to sports or very heavy labor
- Must have symmetrical strength and proprioception before returning to unrestricted activity
- Functional Bracing is used for sports or work activities that put the reconstruction at risk until the patient reaches 18mo postop