



ACL Reconstruction Protocol **Andrea Saterbak, MD**

Stage I Early (1-14 days):

- Protective bracing, ice, compression, and elevation
- Ambulation training: Weight bearing with crutches – 4 point gait (crutches assist)
- PROM/AAROM: Note: range limiting braces may or may not be used during this phase
- Patellar mobilization – Grades I & II
- Muscle setting/isometrics (i.e. quadriceps, HS, and adductors, multiple angles). May augment with electrical stim
- SLR's – supine
- Stretching (i.e. hamstrings, gastrocnemius/soleus)
- Ankle pumps to reduce gravity effects on swelling (elevate leg above heart)

Stage I Late (2-4 weeks):

- Continue above exercises
- Emphasize normal gait mechanics
- Progress weight bearing 75% to full
- Initiate weight shifting exercising
- SLRs in four planes
- Heel/toe raises
- Initiate open chain extensions (range 90⁰ -40⁰)
- Initiate closed chain squats
- Hamstring PREs
- Trunk/pelvis stability program
- Well-body exercises

Stage II Early (5-6 weeks):

- Continue isometric exercise, multiple angles
- Advance PRE-program: quadriceps, hamstrings, gastroc, and hips
- Advance closed chain strengthening
- LE flexibility program

- Advance trunk stability
- Endurance training (i.e. bike, pool, ski machine, etc)
- Proprioception training, tilt boards, BAPS board, bean walking, single leg stance, challenged stance

Stage II Late (7-10 weeks):

- Continue above exercises; advance strengthening, endurance and flexibility as indicated
- Advance proprioceptive training to high-speed stepping drills, unstable surface challenge drills, balance beam
- PNF pattern
- Initiate walk/jog program at the end of this phase
- Initiate plyometric training (i.e. double/single leg bounding, initiate skill specific drills at the end of this phase (make sure to take it slow)

Stage III (11-24 weeks):

- Continue LE flexibility
- Advance PRE-strengthening
- Advance closed chain exercise
- Advance proprioceptive training (i.e. box jumps, jump rope)
- Agility drills specific to skill (drills from sports practices)
- Advance endurance training
- Isokinetic training (if desired)
- Progress running program, full speed jog, sprints, figure 8s, running and cutting, running and change of direction, shuffling, backpedal
- **Sports test at month 3-4: Contact Sarah (Dr Saterbak's CA) for specific information**

Stage IV (6+ months):

- Continue phase III, advance as appropriate
- Advance agility drills
- Advance running drills
- Implement drills specific to sport or occupation
- Determine the need for protective bracing before return to sport or work