

# ACL Reconstruction Protocol Andrea Saterbak, MD

# Stage I Early (1-14 days):

- Protective bracing, ice, compression, and elevation
- Ambulation training: Weightbearing with crutches 4-point gait (crutches assist)
- PROM/AAROM (Note: range limiting braces may or may not be used during this phase)
- Patellar mobilization Grade I & II
- Muscle setting/isometrics (i.e. quadriceps, hamstrings, and adductors, multiple angles) May augment with electrical stimulation
- Straight leg raises 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 gain mechanics
- Progress weightbearing from 75% to 100%
- Initiate weight shifting exercises
- Straight leg raises in four planes
- Heel/toe raises
- Initiate open chain extensions (range 90° to 40°)
- Initiate closed chain squats
- Hamstring PRE's
- Trunk/pelvis stability program
- Well-body exercises

#### Stage II Early (5-6 weeks):

- Continue isometric exercise, multiple angles
- Advance PRE-program: quadriceps, hamstrings, gastrocnemius, and hips
- Advance closed chain strengthening
- Lower extremity flexibility program
- Advance trunk stability
- Endurance training (i.e. bike, pool, ski machine, etc.)
- Proprioception training: tilt boards, BAPS board, beam 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 change drills, and balance beam
- PNF pattern
- Initiate plyometric training (i.e. double/single leg bounding)
- Initiate walk/job program at the end of this phase
- Initiate skill specific drills at the end of this phase (make sure to take it slow)

### Stage III (11-24 weeks):

- Continue lower extremity flexibility
- Advance PRE-strengthening
- Advance closed chain exercises
- 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, backpedaling

# Stage IV (6+ months):

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

If you have any questions or concerns, please contact Dr. Saterbak's office at 651-351-2618 or SaterbakAcareteam@tcomn.com