ACL Reconstruction with Meniscal Repair



Basic ACL protocol but no passive range of motion (PROM) greater than 90 degrees for four weeks; no squatting or hyperflexion for six months; no deep squats for 6 to 9 months; incorporate meniscal repair protocol.

Immediate Post-Op

- Non-weight-bearing with crutches during the first two weeks.
- Brace locked in extension for ambulation except for physical therapy and exercises for the first four weeks then open brace up for ambulation as quadriceps strength improves; sleep with brace on.
- Long-leg hinged brace discontinued when gait is normal and good quad control, usually at four weeks.
- Cooling device or ice used on knee every two hours for 20 to 30 minutes for first week, then continue as needed for swelling and pain management.

Weeks 1 to 2

- Focus on achieving full extension: heel prop and prone hang.
- Teach patellar mobilizations: inferior, superior & medial glides & patellar tilts.
- Focus on quad activation (use neuromuscular STIM if patient has poor quad contraction).
- Ankle pumps, quad sets in full extension, straight leg raises with brace locked in extension, heel slides, hamstring sets.
- With hamstring autograft no active hamstring exercises until week two; no open chain resisted hamstring curls until four weeks post-op.

- Active hip exercises: side-lying adduction/abduction, prone extension.
- Stretch hamstrings & calves.

Weeks 3 to 6

- Active range of motion (AROM) with flexion goal of 130 degrees by end of week six.
- Start stationary bike (low resistance, seat high).
- OK to stop using brace at night while sleeping.
- Resisted leg curls in prone position protecting knee from hyperextension.
- Resisted gastric/soleus exercises progressing to bilateral toe raises as tolerated then single leg toe raises.
- Add resistance to hip exercises.
- At post-op day 28 add
 - Partial squats at o to 30 degrees of knee flexion, perform bilateral.
 - o Progressive quad resistance.

Weeks 7 to 12

- Range of Motion (ROM): increase flexion to full and ensure full extension is achieved.
- Increase resistance exercises
 - o Progress to weighted straight leg raises.
 - Progress exercise on leg press/hack squat as tolerated with emphasis on high reps, low resistance in range of 0 to 90 degrees.
 - Increase ROM for bilateral partial squats from 30 to 45 degrees of knee flexion.
 - Emphasize high repetition and low resistance weights.
- Balance activities.
- Isometric & isotonic training for hamstrings.

Months 3 to 6

- Stationary bike, unilateral pedaling to emphasize hamstrings.
- Agility workouts (figure-eights, shuttle runs).
- Exercises on weight machines
 - High reps to work on muscle endurance.
 - o Leg press/hack squat o to 90 degrees.
 - o Hip exercises.
 - Progressively increase walking to tolerance on treadmill.
- Begin jogging weeks 13 and 14
 - Up &* down straightaway, no curves, stop at end & turn around.
 - Take day off between each workout to see how knee responds.
 - o If pain or swelling develops, back off.
 - Ice after jogging.
- At weeks 15 and 16
 - o Begin running around track, gentle curves.
 - o Progress speed, intensity & duration.

6 Months

- Ok for light tennis, golf.
- Begin sport-specific training.
- Return to sport
 - o Hamstring autograft: 6 to 8 months.
 - Achilles tendon allograft: 8 to 12 months.
 - Progression must be gradual & sportspecific.