

Dr. Ruwe ACL Reconstruction Protocol

Post-op 1-2 weeks

Goals:

- 25-50% WB
- ROM 0-100 degrees
- Stress full extension!
- Reduce Edema
- Prevent Quad shutdown

Criteria for WB progression:

- For 25% WB, pt must be able to elicit good isolated quad set and have full A/P knee extension.
- For 50% WB, pt must demonstrate independent double-leg mini squats to 30 degrees.
- 10 degree extension block in Don Joy should be replaced by 0 degree block.

Guidelines:

- Initiate NMES to quads if pt is unable to elicit a good isolated quad contraction.
- Quad sets, Quad/Ham Co-contractions, ankle ROM, Patellar mobs.
- AA/PROM as tolerated supine, sitting and prone.
- Emphasize hamstring flexibility.
- Initiate stationary bike, partial to full revolutions as ROM permits.
- Initiate multi-directional SLR with resistance above the knee.
- Initiate closed chain activities within WB status, include unrestrictive mini-squats 0-40 degrees.
- Utilize modalities as appropriate for edema reduction.
- Use of immobilizer is D/C at MD visit if quad control permits.
- Physical therapy should coincide with MD follow up.

Post-op 2-4 weeks

Goals:

- 50-100% WB
- ROM 0-125 degrees
- Stress full extension
- Minimize edema
- Begin Isotonics

Criteria for WB progression:

- Patient may be FWB with brace if demonstrating good quad control, no instability or deviation. Patient should also demonstrate ability to perform 5 single-leg mini-squats to 30 degrees with good control.

Guidelines:

- Continue with PROM for flexion and extension. If zero degrees extension not attained, increase hamstring flexibility efforts.
- Continue edema reduction modalities.
- Consider McConnell tape for PF symptoms if needed.
- Initiate hamstring isotonic in available range as tolerated.
- Initiate leg press in 0-90 degrees ROM.

Post-op 4-6 weeks

Goals:

- FWB gait.
- Full ROM
- Increase strength and knee control.
- Bone plug should be incorporated at 6 weeks.

Guidelines:

- Continue to progress isotonic exercises.
- Step-up exercises: Forward, Lateral, Over.
- Seated calf raises with resistance.
- Wall squats with ball behind back.
- Begin retro treadmill ambulation at 0 degree incline for increased quad/ham control.
- Resisted gait exercises as tolerated (forward/backward)
- Flexion and extension exercises on Fitter.
- Build in proprioceptive facilitation. May include BAPS and PNF activities.

Post-op 6-16 weeks

Goals:

- Maximize strength, endurance and knee control.
- Brace use dependent on quad control. Criteria for quad control: Pt should demonstrate ability to perform 10 single-leg squats at 30-60 degrees with good control.

Criteria for Jogging:

- Must be initiated under direct supervision of physical therapist.
- Once no deviations exist, patient may jog independently.
- Must be approved by surgeon.

Guidelines:

- Continue and progress strengthening and proprioceptive endurance and activities.
- Initiate lateral drills on Fitter.
- Heel touches. Begin on floor and progress to step.

- Mini-tramp marches.
- Proprio-band.
- Jumps on Total Gym with low incline or leg press.
- Stepper/Stair Master.
- Lunges
- Four point touch drill.
- Quick steps (forward and backward)
- Hamstring curls on ball.
- Power skips
- Straddle steps.
- Single-leg full squats to 45 degrees.
- Double-leg jumps. Utilize mini-tramp if needed.
- Lateral quick steps.
- Lateral resisted gait exercises.
- Jogging in straight line at around 12 weeks with brace if approved by surgeon.

Post-op 4-6 months

Goals:

- Initiate return to athletics.
- Brace use indicated until end of first year.
- No deviations exist with jogging.

Guidelines:

- Continue and progress all strengthening and functional training activities.
- Progress jog to run and other athletics as indicated.
- Initiate running progression program beginning with ¼ mile and advance as indicated.

Post-op 6-9 months

Goals:

- Continue return to athletics.
- No instability with functional activities including jogging.
- Progress functional training and strengthening to include cutting, braiding, etc when quad strength is 85-90% of uninvolved side.