

Anterior Cruciate Ligament Reconstruction Physical Therapy Protocol

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Dr. Bradley Raphael MD

0 - 2 Weeks Post-Operative

Goals

- Decrease pain and effusion
- Range of motion 0 - 90 emphasizing terminal extension
- Good VMO control and tone
- Full weight bearing with axillary crutches

Treatment

- Cold packs, ice, compression boot, elevation
- Patellar mobilization
- Stretching and range of motions exercises:
- Towel stretches
- Sitting in full extension with heel prop
- Prone hang
- Heel slides and Active assisted ROM
- Thera-Band ankle exercises
- Neuromuscular stimulation VMS to the VMO on table in long sitting position
- Biofeedback
- Active quadriceps setting (isometrics)
- Straight leg raises
- Calf raises
- Mini squats (partial)
- Weight shifting
- Gait training with crutches
- Girth measurements



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📍 **Practicing Locations**

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Anterior Cruciate Ligament Reconstruction Physical Therapy Protocol

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2 - 6 Weeks Post-Operative

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Goals

- Eliminate effusion
- Good patellar mobility and tracking
- Good quad set and control
- Full passive and active range of motion
- Normal gait pattern full weight bearing

Treatment

- May continue previous exercises
- Stationary bike
- Prone knee flexion
- Thera-Band knee extension
- Calf raise on floor progressing to single leg raise progressing to weighted calf raise
- Quarter squats progressing to wall sits progressing to weighted quarter squats
- Step ups
- Lateral step ups
- Straight leg raises progressing to multi hip machine at 15-20#
- Leg press 10 degrees - 60 degrees two legs with ball squeeze progressing to single leg
- BAPS board
- Stairmaster
- Standing balance activities progressing to trampoline
- Girth measurements

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6 - 10 Weeks Post-Operative

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Goals

- Recover strength
- Increase proprioception
- Successfully progress to open kinetic chain

Treatment

- Continue with the 2-6 week plan of care, weaning exercises as appropriate. The following exercises may be added as appropriate.
- Active warm up prior to each exercise session
- Leg press 10 degrees - 90 degrees
- Lateral agility exercise – side to side progressing to side to side over a box
- At 8 weeks: may add open chain strengthening: quad board progressing to resisted quad board progressing to leg extension progressing to isokinetics as appropriate. Athlete must have no patellar femoral joint symptoms and normal patellar mobility to progress to this stage. Must be cleared by physician!!!!
- Girth measurements



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10 - 16 Weeks Post-Operative

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Goals

- Recover full strength
- Recover full pre-injury function
- Recover proprioception
- Recover full pre-injury, sport specific function

Treatment

- Continue with 6-10 week plan weaning exercises as appropriate.
- First isokinetic strength test at 12 weeks at earliest
- Eccentric exercise as appropriate when strength is 90%
- Girth measurements
- Functional testing when strength test is at 85%

Criteria for Return to Sports

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- **75% - 80% QUAD STRENGTH:**
- May begin straight ahead jogging
- Progress to sprinting activities, cutting and sports specific functional activities as tolerated when strength is at 90%
- 85-100/100 on functional knee test score
- Return to full activity with functional knee brace
- Continue with maintenance program for quadriceps tone and strength