

# heekin<sup>®</sup> Orthopedic S P E C I A L I S T S

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<p style="text-align: center;"><b>PCL RECONSTRUCTION</b> <b>(INCLUDES ACL WITH PCL RECONSTRUCTION, AND POSTERIOR LATERAL CORNER RECONSTRUCTION WITH PCL)</b> PHYSICAL THERAPY PROTOCOL</p>
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#### Preoperative Guidelines

- Restore full AROM, normal gait and balance
- Strengthen involved extremity
- Educate patient on:
  - Post-op exercises
  - Use of crutches (level and stairs)
  - Post-op **precautions**: importance of extension, bed positioning, brace (locked at 0 degrees for ambulation), avoid active HS exercises 1<sup>st</sup> 6 weeks, avoid flexion > 60 degrees
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**Note: Exercise prescription is dependent upon the tissue healing process and *individual* functional readiness in *all* stages. If any concerns or complications arise regarding the progress of any patient, physical therapy will contact the orthopedist.**

#### Phase I (Days 1-7)

- Long leg brace locked at 0 degrees
- Ambulate with crutches WBAT **with brace locked at 0.**
- Stair education **with brace locked at 0.**
- Prone hangs and/or supine extension with bolster to 0 degrees ext
- If ACL is not involved:** Active Ext 45-0 (**do not exceed 60 degrees flex**) Progress 60-0
- Passive Flex 0-60 (do not exceed 60 degrees flex).** **NO active HS**
- Gentle HS/gastroc/soleus stretch
- Calf pumping
- Patellar mobilization
- Quad sets: use e-stim. if patient unable to perform independently
- SLR without lag (**brace on**). Do in parallel bars if poor quad control
- Double leg calf raises (**brace on**)
- Well-leg Theraband in parallel bars (**brace on**)
- Well-leg bicycle

- UBE
- Ice pack with knee in extension

**Goals:** Full passive extension, SLR without lag, ROM 0-50 degrees

### **Phase II (Weeks 2 - 3)**

- Long leg brace locked at 0 degrees-ambulate with crutches WBAT
- Continue patellar mobilization
- Begin scar massage after incision site sloughs and scar is formed
- Ensure full extension to 0 degrees
- Continue HS/gastroc/soleus stretch
- Continue Passive Flex. 0-60 (do not exceed 60 degrees). **NO active HS**
- Continue short arc quads 0-60 degrees (if no RPPS symptoms)
- Double Leg Press/Total Gym 0-45 degrees (low resistance)
- Mini-Squats 0-45 degrees
- Double leg calf raises, progress to single leg as tolerated
- Continue well-leg Theraband exercises with brace on
- Single balance activities with brace on

**Goals:** ROM 0-60 degrees, minimal effusion, normal patellar mobility, no incision restrictions

### **Phase III (Weeks 4-6)**

- Long leg brace locked at 0 degrees
- May D/C crutches if good quad control (can do 30 SLR without lag, normal gait)
- Initiate bicycling for endurance and ROM (**do not exceed 90 degrees**)
- Progress ROM to 0-90 degrees (**do not exceed 90 degrees**)
- Progress closed chain quad strengthening up to 60 degrees
- Single leg calf raise
- Stairmaster (brace off)
- Continue HS/gastroc/soleus stretching
- Continue balance training: cone walking, single leg balance, well-leg tubing, BAPS in parallel bars, body blade, plyoback
- Pool walking, closed chain pool exercises

**Goals:** Normal gait, no effusion, ROM 0-90 degrees, single leg balance x 30 secs

### **Phase IV (Weeks 7 to 12)**

- Fit for functional brace
- Continue bicycle and stairmaster for endurance
- Begin Treadmill: forward and backward walking
- Elliptical
- Progress ROM to 0-115 degrees (do not exceed 115 degrees)
- Continue HS/gastroc/soleus stretching
- Initiate prone/standing HS curls...no resistance yet

- Progress closed kinetic chain exercises as tolerated...lateral step downs, etc
- Progress balance/proprioception activities...BAPS, plyoback, etc
- Progress in pool therapy

**Goals:** ROM 0-110 degrees walk 2 miles at 20 min/mile pace

**Phase V (3-4 months)**

- Brace used for strenuous exercise only
- Continue bike or Stairmaster for endurance
- Progress closed chain exercises
- Increase HS exercises gradually (light weight)
- Progress balance/proprioception activities
- Jog on mini-tramp/hop on mini-tramp
- Pool: running, hopping/jumping in water/kick board swimming
- Begin easy plyometrics: cone hopping (double leg), jump off 1 step, etc
- Begin agility drills/sports specific drills (shuffles, carioca, figure 8, etc)
- When jogging gait is normal, quad strength is 5/5 and can hop 10 times on affected limb without pain, begin straight-line walk/jog progression on flat surface

**Goals:** Full ROM, walk/jog 2 miles at 15 min/mile pace

**Return to Activity (5 to 6 months)**

- Progress running as tolerated
- Progress agility drills/sports specific drills
- Plyometric progression
- Continue LE stretches...include prone quad stretching
- Return to competitive sports at 6 months post-op if goals are met (see 6 month goals)

**6 months Goals:**

- No effusion or giving out
- Functional tests at least 90% of opposite leg to clear for sports and discharge (single leg hop and 12 meter hop for time)

***No contact sports until 9 months post-op***