



PCL Repair/Reconstruction

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- Phase I – Immediate Post-Surgical Phase (Week 0-2)
 - Goals
 - Maintain integrity of reconstructed tissue
 - Gradually increase PROM
 - Decrease pain and inflammation
 - Prevent muscular inhibition
 - Minimize stress on healing PCL/Graft (minimize posterior sag of tibia)
 - Cryotherapy for pain/inflammation
 - Ice 15-20 minutes every hour
 - Sleeping
 - Sleep in brace/knee immobilizer
 - Weight Bearing
 - Toe-touch weight bearing with crutches
 - Brace
 - Hinged brace locked in extension
 - May be extra padding added behind tibia to support PCL/Graft
 - ROM
 - AAROM, prone or support tibia to minimize posterior sag
 - 0-40 degrees to begin. No hyperextension for 6 weeks
 - Goal full extension by 2 weeks post op
 - Muscle Retraining
 - Quadriceps isometrics, SLR (in brace preferred to minimize posterior sag of tibia)
 - Heel slides with tibia support
 - Avoid hamstrings stretches, active hamstrings exercises for 6 weeks
 - Exercises
 - Quad sets, patellar mobs, gastroc/soleus stretches
 - Side-lying hip/core
 - Prone exercises encouraged to avoid gravity stress on PCL/Graft

- Phase II – Protection Phase (Week 2-6)

- Goals
 - Allow healing of soft tissue
 - Do not overstress healing tissue
 - Gradually increase ROM
 - Progression based on swelling/inflammation
 - Decrease pain and inflammation
- Sleeping
 - Sleep in brace until 6 weeks post op
- Weight Bearing
 - Toe-touch weight bearing with crutches
- Brace
 - Hinged brace locked in extension
 - May be extra padding added behind tibia to support PCL/Graft
- Week 2-4
 - Continue use of ice as needed
 - Continue ROM progression- 0-70 degrees
 - Toe-touch weight bearing
- Week 4-6
 - May use heat prior to exercises
 - Gradually increase ROM- 0-90 degrees
 - Toe-touch weight bearing
 - Muscle retraining
 - Core strengthening

- Phase III – Intermediate Phase (Week 6-12)

- Goals
 - Increase to full ROM (Week 6-8)
 - Focus on maintaining full extension
 - Eliminate swelling
 - Functional exercise movements
- Criteria to progress to Phase III
 - Minimal inflammation/pain
 - Near full ROM
 - Strong quadriceps contraction
- Brace
 - Transition to dynamic PCL brace at 6 weeks post op (Rebound brace)
- Weight Bearing
 - Initiate progressive weight bearing and transition off crutches over 1-2 weeks. Progress to WBAT
- Continue quadriceps strengthening
- Continue above exercises

- May begin wall squats (week 8)
- May begin exercise bike (week 8)
- Closed-chain quad exercises
- Balance, proprioception
- Core/hip/glute program

- Phase IV – Strengthening Phase (Week 12-18)
 - Goals
 - Maintain full ROM
 - Improve limb strength and endurance
 - Gradual return to functional activities
 - Criteria to progress to Phase IV
 - Full, non-painful ROM
 - Absence of swelling/inflammation
 - Continue above exercises
 - May begin straight-ahead jogging at 16 weeks
 - May begin jumping at 18 weeks if doing well

- Phase V – Return to Activity Phase (Week 18-24+)
 - Goals
 - Gradual return to strenuous work activities
 - Gradual return to recreational sports activities
 - Criteria to progress to Phase V
 - Appropriate strength level/Clinical exam
 - May begin sprinting, cutting, pivoting at 22-24 weeks
 - Initiate plyometric program, sport specific drills at 22-24 weeks
 - Clearance to return to sport dependent upon progress with PT, discussion with Dr. Hess