



ACL Reconstruction

Patellar Tendon, Quad Tendon Autograft

Ryan W. Hess, MD

Dr. Hess Care Coordinator Phone: 763-302-2223

Fax: 763-302-2401

- 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
 - Cryotherapy for pain/inflammation
 - Ice 15-20 minutes every hour
 - Sleeping
 - Sleep in brace/knee immobilizer
 - Weight Bearing
 - As tolerated in hinged brace
 - Pt usually instructed to be 50% WB until PT begins
 - Crutches as needed
 - Brace
 - Hinged brace locked in extension for ambulation until good quad control
 - Once good quad control, may unlock brace for ambulation
 - ROM
 - As tolerated (unless meniscus repair, then defer to ROM/WB restrictions in appropriate meniscus repair protocol as directed in op note)
 - Goal full extension, at least 90 degrees flexion by 2 weeks post op
 - Muscle Retraining
 - Quadriceps isometrics, SLR
 - Heel slides
 - Patellar Mobilizations

- 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
 - Good patellar mobility
- Week 2-4
 - Continue use of ice as needed
 - Continue ROM progression
 - Weight bearing
 - May discontinue crutches when appropriate
 - Core strengthening
- Week 4-6
 - May use heat prior to exercises
 - Gradually increase ROM
 - Muscle retraining
 - Stationary bicycle if pain permits (in brace)
 - Proprioception training
 - Core strengthening

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

- Goals
 - Full ROM (Week 6-8)
 - Focus on maintaining full extension
 - Eliminate swelling
 - Functional exercise movements
 - May discontinue brace (Dr. Hess discretion)
- Criteria to progress to Phase III
 - Minimal inflammation/pain
 - Near full ROM
 - Strong quadriceps contraction
- Continue quadriceps strengthening
- Continue above exercises
- May begin wall squats
- May begin pool program
- 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 running at 12 weeks
- May begin jumping at 16 weeks

- 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 20-22 weeks
- Initiate plyometric program, sport specific drills at 20-22 weeks
- May complete functional sports assessment (FSA) at 24 weeks
- Clearance to return to sport dependent upon progress with PT, discussion with Dr. Hess