



JOSEPH R LOCKER, M.D.

1805 SE 16th Ave., Suite 1002 Ocala, FL 34471 • 352-620-1900

ACL RECONSTRUCTIONS (ALLOGRAFT OR HAMSTRING AUTOGRAFT)

Phase 1:

Goals...

- Decrease Pain and Inflammation
- Regain full extension
- Restore normal patellofemoral joint mobility.
- Demonstrate good neuromuscular control for daily activities.
- Normalize gait.
- ACL Brace for ambulation.

Week 0-2

- ROM Exercises (PROM, AAROM, AROM)
 - Emphasize full extension equal to contralateral knee
 - Knee flexion and extension without restriction.
 - ◇ Flexion limited to 90 with meniscal repair for the first 6 weeks
- Flexibility exercises:
 - Hamstring stretches
- Quadriceps Exercises:
 - Quadriceps sets and straight leg raises
 - Quadriceps recruitment techniques.
- Gait Training:
 - No weightbearing restrictions.
 - Wean from crutches when demonstrating adequate neuromuscular control.

Weeks 3-6

- ROM Considerations:
 - Ensure full extension
 - Aggressively pursue full knee flexion.
- Hamstring Exercises:
 - Open and Closed chain kinetic strengthening.
- Quadriceps Exercises:
 - Closed chain kinetic strengthening.
 - Open chain kinetic strengthening from 90-45 degrees.
- Proprioception Exercises
- Non-Impact Exercises:
 - Stationary bicycle, stairmaster, Elliptical

Phase 2:

Goals...

- Improve strength of affected to that of contralateral side.
- Comfortable sprinting and distance running.
- Demonstrate adeptness at controlled pivoting, cutting and jumping.
- Mastery of diverse functional activities.
- Discontinue ACL Brace.

Weeks 7-9

- Strengthening Activities:
 - Increase intensity of closed kinetic chain quadriceps exercises.
 - Begin light open chain kinetic quadriceps exercises
 - Continue progression with hamstring exercises
 - Generalized lower extremities and trunk training
- Criteria to begin running:
 - Full knee extension
 - No knee effusion
 - Adequate quadriceps neuromuscular control
 - No meniscal repair or articular cartilage defect
- Running Programs:
 - Begin running on treadmill
 - Progress running program to level outside ground
 - Begin basic functional activities
 - Institute easy controlled pivoting, cutting, jumping and plyometrics when appropriate neuromuscular control is demonstrated.

Weeks 10-12

- Strengthening Exercises:
 - Increase intensity for open chain kinetic quadriceps exercises.
- Running Programs:
 - Increase speed and intensity
 - Increase the complexity and intensity of functional exercises, pivoting, cutting, jumping, and plyometrics.

Phase 3:

Goals...

- Approximate muscular strength of contralateral lower extremity.
- Normalize running technique and increase speed.
- Mastery of sport specific activities in preparation for return to sports.

Weeks 13-16:

- Intense lower extremity weight training program.
- Continue sprints to improve technique and speed.
- Institute aggressive sport specific training program.
 - Emphasize necessary pivoting, cutting, jumping, and plyometrics for given sport.
- Simulate specific athletic demands on the athlete's playing field.

Phase 4:

Goals...

- Return to sports is planned for a minimum of 4 months after ACL reconstruction.
- Athletes must demonstrate ability to perform all of the athletic demands of their specific sports prior to returning to competition.