



ROSENBERG COOLEY METCALF  
THE ORTHOPEDIC CLINIC AT PARK CITY

**Charles C. Lind, MD**  
**ACL Healing Response**  
**Post-Operative Protocol**

**Phase I – Maximum Protection (Weeks 0 to 2):**

- Brace - six weeks
- Use crutches weight bearing as tolerated for 7 to 10 days to reduce swelling. The patient may discontinue the crutches when they can ambulate with no limp
  - Range of Motion
    - Patella mobility
    - Emphasize full extension (avoid hyperextension x 4-6 weeks)
    - Progress to full flexion as tolerated
  - Exercises
    - Quadriceps setting, focusing on VMO
    - Multi-plane straight leg raising
    - Gait training

**Phase II – Progressive Stretching and Early Strengthening (Weeks 2 to 6):**

**Weeks 2 to 4:**

- Range of Motion
  - Patella mobility and scar massage
  - Full knee extension
  - Knee flexion to progressing
- Exercises
  - Bilateral closed kinetic chain squatting
  - Multi-plane open and closed kinetic chain hip strengthening
  - Step-up progression
  - Stationary biking
  - Pool program: deep water cycling and straight leg flutter kicks, shallow water walking
  - Proprioception drills

**Weeks 4 to 6:**

- Exercises
  - Advance strengthening program progressing to unilateral as tolerated
  - Increase intensity of stationary bike program, may add treadmill walking and/or elliptical

**Phase III – Advanced Strengthening and Proprioception Phase (Weeks 6 to 10):**

**Weeks 6 to 10:**

- Range of Motion
  - Full knee flexion and hyper-extension with terminal stretch (active and passive)
- Exercises
  - Advance intensity of cardiovascular program; no running
  - Increase intensity of closed kinetic chain exercises
  - Advance proprioception drills
  - Gym program – no extensions
  - Begin lateral functional cord work; no rotation
  - Pool running program at week 8

**Phase IV – Advance Strengthening and Plyometric Drill Phase (Weeks 10 to 16):**

**Weeks 10 to16:**

- Implement a full gym strengthening program; including leg extensions at 30° - 0°
- Linear running
- Plyometric drills
- Fit functional brace

**Phase V – Return to Sport and Functional Drills Phase (Weeks 16 to 20):**

- Functional brace on for sport specific drills
- Sprinting
- Field drills – lateral and rotational
- Follow-up examination with the physician
- Sports test for return to competition