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## ISOLATED ACL RECONSTRUCTION POSTOPERATIVE REHABILITATION PROTOCOL

### Phase 1: 0-2 Weeks (Surgery to first postoperative visit)—**WBAT, 0-90° ROM**

- **Weightbearing:** WBAT, Brace locked at 0 degrees for ambulation and sleeping, may unlock for range of motion exercises
  - Discontinue crutches when gait is non-antalgic
- **Range of Motion:** 0-90° with emphasis on full extension
- **Therapeutic Exercises:**
  - Patella mobilization
  - Straight leg raise supine with brace locked at 0 degrees, Quad Sets
  - Ankle Pumps
  - Short crank (90mm) ergometry

### Phase 2: 2-6 Weeks (First postoperative visit to 2<sup>nd</sup>)—**WBAT, ROM 0-125°**

- **Weightbearing:** As tolerated, in brace (see guidelines for brace discontinuation below)
- **Brace:** unlock brace for ambulation when quad control is adequate (typically around 2 weeks)
  - Discontinue brace when patient has achieved full extension with no extension lag (typically 4 weeks)
- **Range of Motion:** 0-125 degrees (Maintain full extension, work on progressive knee flexion)
- **Therapeutic Exercises:**
  - Closed chain extension exercises
  - Active knee extension from 40 degrees
  - Standard (170mm) ergometry (if knee ROM > 115 degrees)
  - Leg Press (80-0 degree arc)
  - Mini Squats / Weight Shifts
  - Proprioception and balance training
  - Initiate Step Up program
    - Includes beginning use of stationary bicycle at ~ 5-6 weeks.

**Phase 3: 6-14 Weeks (2<sup>nd</sup> Postoperative visit to 3<sup>rd</sup>)—WBAT, ROM as Tolerated**

- **Weightbearing:** Full Weightbearing, no brace
  - **Range of Motion:** Full, painless ROM
  - **Therapeutic Exercises:**
    - Advance closed chain strengthening exercises, proprioception activities
    - Begin use of Stairmaster/Elliptical
    - Retrograde treadmill ambulation
    - Progressive Squat program
    - Initiate Step-Down program
    - Versaclimber/Nordic Track
    - Leg Press, Lunges
    - Isotonic Knee Extensions (90-40 degrees, closed chain preferred)
    - Agility exercises (sport cord)
    - **Can start straight ahead running at 12 weeks**
      - Begin forward running (treadmill) program when 8" step down satisfactory
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**Phase 4: 14 weeks-6 months (3<sup>rd</sup> postoperative visit and beyond)—Sports Specific Drills**

- **Weightbearing:** Full Weightbearing, no brace
  - **Range of Motion:** Full, painless ROM
  - **Therapeutic Exercises:**
    - Advance Sports-Specific Agility Drills
    - Start Plyometric program
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**Phase 5: 6-12 months: Gradual Return to Sport**

- Maintenance Program Strengthening & Flexibility program
- 22 weeks: Advance Plyometric program
- **Gradual return to sport/athletic activity (MD directed)**
  - **Typically, 10-12 months**