

# Rehabilitation Protocol: Anterior Cruciate Ligament (ACL) Reconstruction with Bone-Patellar Tendon-Bone Autograft

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## Phase I (Weeks 0-4)

- **Weight bearing:** As tolerated with crutches (may be modified if concomitant meniscal repair/meniscal transplant or articular cartilage procedure is performed)
- **Hinged Knee Brace:**
  - Locked in full extension for ambulation and sleeping (Weeks 0-1)
  - Unlocked for ambulation and removed while sleeping (Weeks 1-4)
- **Range of Motion - AAROM ~ AROM as tolerated**
- **Therapeutic Exercises**
  - Quad/Hamstring sets
  - Heel slides
  - Non-weight bearing stretch of the Gastroc/Soleus
  - Straight-Leg Raise with brace in full extension until quad strength prevents extension lag

## Phase II (Weeks 4-6)

- **Weight bearing:** As tolerated -- discontinue crutch use
- **Hinged Knee Brace:** Discontinue brace use when patient has achieved full extension with no evidence of extension lag
- **Range of Motion -** Maintain full knee extension - work on progressive knee flexion
- **Therapeutic Exercises**
  - Closed chain extension exercises
  - Hamstring curls
  - Toe raises
  - Balance exercises
  - Progress to weight bearing stretch of the Gastroc/Soleus
  - Begin use of the stationary bicycle

## Phase III (Weeks 6-16)

- **Weight bearing:** Full weight bearing
  - **Range of Motion -** Full/Painless ROM
  - **Therapeutic Exercises**
    - Advance closed chain strengthening exercises, proprioception activities
    - Begin use of the Stairmaster/Elliptical
- Can Start Straight Ahead Running at 12 Weeks

## Phase IV (Months 4-6)

- Gradual return to athletic activity as tolerated
- Maintenance program for strength and endurance